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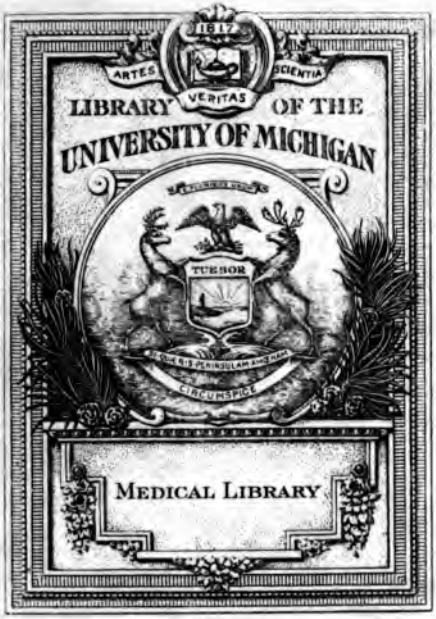
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THE

# WESTERN LANCET

AND

# HOSPITAL REPORTER.

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# WESTERN LANCET.

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## ON THE CERTAINTY AND UNCERTAINTY OF MEDICINE.

ART. 1.—A VALEDICTORY ADDRESS, *delivered May* 28, 1844, *before the Medical Convention of Ohio, by* JOHN P. HARRISON, M. D., *Professor f Materia Medica in the Medical College of Ohio.*

GENTLEMEN: The science of Medicine has been greatly indebted for its advancement to that liberal spirit which binds men together in consentient effort to promote each other's improvement. This social kindliness belongs to man in all the phases of his being; it is exhibited by the child in the thoughtless gaities of its existence; it is seen in the various combinations of political partizanship, and with controlling influence it mingles with the adorations which the frail children of earth pay to their supreme and universal Father. It is this spirit of social sympathy operating upon our professional views and interests, which has called us together this day to attend to the anniversary of the Medical Convention of Ohio. We have assembled together to cooperate with each other in pushing on the triumphs of medical science; to enliven and invigorate, by collision of thought, our minds in the exalted task of cultivating the philosophy of living actions, in health and in disease, and of suggesting improved methods of preventing, alleviating, and curing human maladies. Inspirited by a high and generous sense of devotion to our profession, let us ever maintain a warm and enduring enthusiasm for the advancement of medicine in the road of utility, honor, and renown, and by lights intermingled and by facts mutually contributed, endeavor to kindle up in each other's minds a more ardent consecration to the work of improvement.

The subject selected for your consideration is the certainty and uncertainty of medicine. Is medicine a certain science; and, if certain, in what respects, and to what extent is it certain?

If uncertainty exists in medicine, what are its sources, and to what extent does that uncertainty operate?

We hope to adjust with some degree of philosophical precision the relative extent, and the several kinds, of certainty and uncertainty which attach to medical science, and the discussion will, we trust, produce an increased conviction in your minds that firm reliance may be reposed in the lights and resources of the science of medicine.

I. *Is medicine a certain scieuce?*

The science of medicine is the product of the reason of man, operating on the materials of observation which have been accumulated by industry, during successive ages of the race. The present glorious edifice of medical science has risen slowly from the obscure foundations of its first cultivation. The constant liabilities of men to disease and accident have always been felt, and that art by which suffering is removed or mitigated, has always received attention, and been practiced by mankind. At first but a rude, unshapen art, medicine rose, with the other departments of human knowledge, from a condition of superstition to one of induction, and now stands forward among kindred sciences as one of the proudest gems which adorn the diadem of imperial mind. In the progress of mankind from barbarism to civilization, the arts always precede the sciences. The wants of the body are felt before those of the intellect; and men seek first those objects which allay their thirst, and appease their hunger, before they indulge the speculative tendencies of the mind in search after the causes of things.

The art of curing maladies preceded the science of medicine. Instinctive determinations, random trials, accidental cures, or spontaneous efforts of nature, would suggest, in the first stages of society, some remedies of value. But these sources of information soon conducted to fallacy, misconception, and error. The reliance reposed in one, or all of them, would at best only establish a narrow and insecure foundation, upon which mere empiricism might erect some successful results of interference at the bed side.

The active and excursive faculty of reason would not be satisfied by a tame surrender of its prerogative to the blind routine of unreflecting experience. Observation would carefully treasure up the notices made, and experiment would educe new facts from the concealed processes of nature. As remedies for the cure of diseases multiplied, and as renewed observation taught physicians the fallacy and inutility of many remedies, a more precise and rigorous philosophy would obtain in the employment of plans for the removal of maladies. Slight reflection soon taught physicians that the mere art of prescribing drugs was but a low and unintellectual pursuit, and that in order to a due developement of the powers of reasoning

in the minds of medical practitioners, a scheme of study far more comprehensive than the knowledge of remedial substances must be prosecuted. It was soon discovered that, for a physician to become a truly rational prescriber of medicinal substances, he must profoundly investigate the structure and laws of the human system; with minute inquiry mark the deviations of diseased action from the type of health; and carefully search into the indications presented in disease, for the intervention of medical art.

Now there is one very signal contradiction which occurs in our profession. It is a contradiction between the science and art of medicine. I do not assert that this contradiction is constant, or that it is the legitimate offspring of the science. But that there is such an opposition between medicine as a science, and medicine as an art, is quite apparent, and susceptible of ready demonstration.

The science of medicine may be taught with great eloquence, and students may flock around the learned professor's chair, eager, with an earnest desire, to profit by his teachings—and plausibilities the most enrapturing may flow from his lips—and yet with all this pomp and circumstance of medical instruction, the art of successfully treating diseases may have been totally neglected, or scornfully thrown aside. Or the art of medicine may oppose the science, proudly arrogate to itself an exclusive control over the treatment of diseases, and magisterially boast of a certainty which belongs not to the science of medicine.

There are two prominent intellectual errors, which lead to opposite points in the opinions which even practitioners of medicine may entertain in reference to the certainty or uncertainty of our art. Arrogant pretensions of medical infallibility and perfectibility, and a sceptical distrust of the utility and certainty of medicine, are sometimes found, even among physicians. These misconceptions of the true standing and relative value of our art spring from a narrow field of observation, and a limited ability of mental vision. In ignorant minds there is a great reliance on the direct, obvious effects of medicinal substances. The uncultivated delight to dwell on the achievements of wonder which the doctor can accomplish. The illiterate and ignorant, therefore, distrust those scientific researches upon which the sound, practical applications of medical art are made to rest, and bend an exclusive eagerness of regard on the displays, or overt acts of the practitioner.

We have said that an apparent contradiction, or opposition, exists between the science and art of medicine, and that this opposition is illustrated even among the members of our profession, as well as among the different classes of society. In the spirit by which the truly scientific practitioner is governed, there is an ingenuous and benevolent bearing evinced,

which is never witnessed in the mere empirical pretender. Science loves the day light—courts freedom of discussion, and delights in communicating the results of its inquiries. Art, on the other hand, seeks concealment, and wishes not to divulge the steps by which it attains its ends. Science is social; art selfish. Science lives by knowledge mutually interchanged; art perfects its processes within doors.

It is by dragging art out of its concealment, and by obliging it to yield its contributions to the building up of a just philosophic induction, that medicine is made a firmly compacted and well proportioned science. Abstract conceptions, refined speculations, and wire-drawn views of disease are inconsistent with a just spirit of inductive philosophy. A dull and spiritless uniformity of practice in medicine stamps a mechanical routine on the art of curing diseases. Uncertainty may arise either from the science, or from the art of medicine. When the science is not fixed and regulated in its doctrines and expositions by a proper knowledge of the art, of all the visionary employments of the mind medicine then becomes the most conspicuous. And when the art of medicine is disconnected in hostile separation from the science, of all practical pursuits that of prescribing for diseases becomes the most uncertain.

This unnatural, perverse disjunction of the art of curing diseases from the scientific principles by which that art should be guided and controlled, has induced in many persons a feeling of distrust to the whole pretensions of medical science. And from this same too exclusive contemplation of medicine, in one or other of its aspects, extravagant opinions of appreciation and of depreciation have arisen in reference to our profession. There have been men of ardent temperaments, who in the first flush and feverishness of youthful blood, have, ere they submitted their acquisitions in medical science to the final test of all sound doctrine—practice, maintained that medicine was a perfect, or at least a very certain art. But being discomfited by the unexpected malignity of disease, they have retired from the scene of their unequal contest with death, with an embittered scepticism towards medical science. Such physicians exclaim against the certainty and usefulness of the profession of medicine, and sink down in hopeless unconcern for the advancement of the science of curing disease.

Medicine is not a perfect—neither is it a conjectural art. It admits of greater attainments; it demands at our hands a most faithful, assiduous culture; and, if properly cultivated, it will still go onward in the road of discovery—of utility—of certainty.

By a vital union of science with art—of the fruits of observation with the deductions of reason—medicine will rise higher and higher in the scale of beneficent results to mankind.

Scientific medicine is the knowledge of the many, methodized, arranged,

and compacted together in a regular series of data and doctrines, so as to be capable of an enlightened comprehension, and of a just practical application. There should be no antagonism between the principles, or theory, and practice of medicine. They are but as the foundation and superstructure; they constitute but one harmonious, well built temple of a useful, scientific art.

To the mind of the superficial physician, who is occupied with the direct practical results of the profession, and who turns away with repugnance from an earnest prosecution of the science, the toil and time expended in the discussion of the principles of medicine seem wasted on the desert air. If there be certainty in medicine, says the superficial thinker in our profession, it is in the teachings of experience, and he rejoices that he is not to be deluded by theories, but that he is a practical man. But his rejoicing is altogether misplaced, for it depends more upon his folly than upon his wisdom.

Uncertainty attaches to medicine in its isolated state, either as a mere science, or as a mere art. But the kind of uncertainty attached to the science of medicine is different from that attached to the art. The science of medicine becomes uncertain because not tested by a practical application of its principles, and is therefore liable to waste its speculations in unprofitable discussions. But when the practice of medicine is followed without the guidance of the science, it becomes a dangerous empiricism. One is the uncertainty of opinion—the other is the uncertainty of blind, erring boldness, dealing with the instruments of life and death. The history of all science proves that speculations apparently the most unprofitable have often been those from which the greatest good has been derived. Kepler's hypothetical views of the numerical harmonies of the universe, and the speculations of the geometers on the properties of the conic sections, are the steps by which a knowledge of the elliptic motions of the planets and the law of gravitation was attained. The intellect of man never achieved a prouder triumph than when a Newton and La Place completed the theory of the heavens, and mankind have never derived greater practical benefits from philosophy than when the splendid astronomical conceptions embodied in that theory, were made subservient to the art of navigation.

And thus it is in the science of medicine. The elements of truth which the patient labor of physicians have brought to light in their investigations of the structure and functions of the human body, in health and disease, have terminated in the most important results to practical medicine. The inquiries of John Hunter into the actions of life, together with his doctrines of inflammation, were productive of the greatest benefits to the art of curing disease.

There is certainty attached to the anatomy and physiology of the human body. The intricate and finely wrought structure of the human body has been explored with most successful diligence by modern anatomists. The laws which govern the movements of life have also been most sedulously studied. From the composite organization of the brain, through all the descending series of tissues and organs, the scalpel of the anatomist has opened a track through which the eye has penetrated into all the recesses of our organization. Anatomy and physiology being the ground work of the entire superstructure of medical science, cannot be too earnestly prosecuted by the student of medicine.

The principles of medical surgery are essentially the same as those of medicine proper. That surgeon is but an humble mechanic who does not cultivate the science of medicine, in its most enlarged sense. The dexterous use of the knife, for the purpose of mutilation of the human body, must be kept in strict subordination to the guiding light of a clear and discriminating judgment. When we speak of the science of medicine, you are to understand us as including the soundest principles of chirurgical knowledge; and when we speak of the art of medicine, reference is made to the treatment of surgical as well as of medical cases.

The perquisition of diseases, their causes, nature, seat, symptoms, and terminations, has been sedulously attended to, and results of the most interesting and useful kind have sprung from the earnestness with which physycians have pursued the inquiries involved. On the subject of epidemic maladies the learned labors of various medical authors have thrown a great amount of certain knowledge. To our profession society is under great obligations for the painful and laborious manner in which medical men have prosecuted the difficult task of ascertaining the origin, rise, and progress of those fatal diseases which, in violent eruption, burst forth in fury upon a whole people.

And if darkness rests on some points connected with this important branch of medical inquiry, that degree of uncertainty which remains by no means lessens the certainty, or depreciates the value of the facts which have been made known by the devoted men who have consecrated themselves to this high service. In the dark ages of medical erudition, every fatal epidemic was ascribed to the malign conjunction of the planets. And when this degrading superstition was dissipated by the clearer light of a true knowledge of the starry heavens, a precipitate and misleading opinion of the contagiousness of diseases of this class exercised a most pestilent power over the minds of men. And even at this day this remnant of a dark era of mental illumination still lingers on the domain of human superstition, paralyzing the efforts of philanthropists, and frustrating the wisest plans for the removal of the sources of epidemic maladies. The zeal

with which, especially during the last few years, the nature and seats of diseases have been prosecuted has led to the most certain knowledge of many morbid affections; and the ability and spirited activity with which the pathology of diseases is at the present day pursued, warrant the inference that a still additional certainty will crown the labors of medical men in this department of our science.

The certainty of medical science, in no one department of its multiplied offices, has been more perspicuously displayed than in that of Materia Medica. A low conception is sometimes attached to this department of medical instruction by those who have bestowed only a transient consideration upon its relative importance in a just scheme of medical knowledge. Materia Medica embraces not merely a historical account of medicines, their modes of action, doses, and methods of administration, but it ascends a step higher, and with enlarged conceptions of disease, lays down the indications of treatment. The first great lesson which an enlightened view of this branch of medicine inculcates is this,—that all remedial substances are but relative agents; that the state of the system must be ascertained with accuracy from careful examination, before medicines are to be given; and that, consequently, to prescribe the most excellent remedies, those endued with the most salutiferous virtues, in cases of sickness not adapted to their action, converts the best curative means into instruments of death.

The vulgar idea, which sometimes even gets lodgment in educated heads, that medicinal substances possess an inherent catholic power to cure diseases, is replete with endless evils. Such an idea is disparaging to the science of medicine, and is constantly inflicting practical mischiefs on society.

To teach materia medica with judiciousness—with practical good results—and with a just comprehension of the vast curative resources with which this department of medicine is replenished, it must be taught in union with a knowledge of the nature, seats, and symptoms of disease, and with a constant interchange of light with the other branches of medical science. The path of instruction which is pursued by the writer on materia medica is not one skirted on either hand by the territory of darkness; but it is a path which lies along the high road of the general science, on which beams a steady radiance, made up of the confluent rays of truth, that pour their lustre on the wide extended way.

Chemistry has contributed her auxiliary stores to augment the resources of materia medica. Botany has opened her garlanded bowers to our inspection, and freely offered her plants of healing power. The animal kingdom has presented its means of cure for our use. Air, earth, water, the vegetable, animal, and mineral kingdoms, have all been in some de-

gree made contributory to the measures by which art wields authority over disease.

II. *If a certain science, in what respects, and to what extent is medicine certain?*

I have already stated that medicine, though a certain, is not a perfect science. This admission by no means impairs the validity of its claims upon every candid mind for favorable regard. What science, in both its dàta, or principles, and its practical applications, is perfect? Surely no intelligent jurist will maintain that the science of either government or of law is perfect. The science of government has been the subject of earnest investigation by the brightest intellects of our species, and has been submitted to constant repetitions of experiment by mankind, still it is an imperfect science—still is it a question of debate and doubt among the most erudite political writers which form of government is the best. We republicans are firmly of the opinion that our glorious scheme of federal and popular representative government is the best earth ever witnessed; but even the fundamental principles of our own excellent constitution are not settled by a consentient, universal judgment; there are disputatious differences of construction on the meaning of our fundamental law. As to the law, it is full of glorious uncertainty, and legislature after legislature are employed to reinforce its sanctions, re-enact its penalties, or re-modify its provisions.

Agriculture is a certain, but by no means a perfect art. It is improvable, and both scientifically and practically, demands a vigilant cultivation to render it more excellent. And thus medicine partakes of much imperfection. Its best and most available means for the eradication of disease, and the mitigation of human suffering, are often counteracted by the inevitable tendency of disease towards the final catastrophe, and by the fallibility of medical skill in selecting the best means for the arrest of morbid action.

But a sceptical objector may contend that the uncertainty of medicine lies in that endless diversity of theories to explain life, disease, and the mode of action of medicines, which fill our medical books, and which are heard from our halls of professorial prelections. Such a caviller might point to the history of medical science, and triumphantly exclaim, 'Behold the uncertainty of medicine! See the moderns enlisted against the ancients—Cullen and Rush arrayed against Hippocrates and Galen! And even among the moderns what opposition of theory—what contrariety of views! Yes,' he might continue, 'medicine is an uncertain—a doubtful science, else wherefore this discrepancy among its votaries? And this variance is not witnessed on speculative points only; but in matters of experience, what doubt, what dispute, what assertion and denial, do we with wonder behold!'

Operating on dubious and mysterious states of vitality, and vital movement, the mind of the most gifted individual will soon be lost in the mazes of uncertainty. Of life, and its movements, we know nothing with assured certainty but what we are taught by careful observation of the phenomena or outward acts of the living body. All inquiry concerning the essence o life—or the vital principle—is of dubious utility. And so all disputes concerning the nature of gravitation seem vain and unprofitable. Life is known and recognized by its actions—gravitation is known and recognized by the results of its agency; and here the mind of man must learn the weakness of its faculties, and the total inadequacy of all our boasted reason to leap the barrier that encloses the certain from the uncertain; the well defined territory of the demonstrable from the dim region of shadows which stretches beyond and around it. The endless disputes, therefore, among physicians concerning the vital principle, and its precise modes of agency, no more invalidate the pretensions of medicine to certainty, than do the controversies respecting the essence of gravitation weaken the high claims of astronomy to our consideration as "the most perfect of sciences."

But the sceptical objector may rely with more confidence in his denial of our enunciation of the certainty of medical science, on the argument adduced from the fact that there have existed, and do yet exist, so many systems of medical doctrine.

We allow that prejudices of opinion, weight of authority, love of novelty, and an ambition of being the builder up of a universal scheme of explanation for all the facts collected by the systematist, have, both separately and collectively, often exercised a misleading influence on the proper cultivation of our science, and have most disastrously affected its best interests. But in what line of human agency—in what field of human pursuit, do you not see man's passions, interests, ambition, and indolence, exerting an injurious power over the cause of truth?

The ancient physicians, from their ignorance of human anatomy and physiology, and from their defective acquaintance with the multiplied and fertile expedients of curing diseases, which the moderns possess, are never to be relied on as safe guides in the theory or practice of medicine.

Hippocrates was the great master spirit of ancient medicine, and his history of diseases, as far as a faithful detail of their symptoms, progress, termination, diagnosis, and prognosis, is concerned, is still of great value to the profession. His practice, however, was characterized correctly by an ancient author, the study of death.

Medicine remained in a state of learned imbecility till the revival of learning and the waking up of the intellect of Europe, in the 15th century. Bacon, the great restorer of modern learning, disenchanted the human mind of an idle chase after visionary forms of truth, and brought it to a

proper appreciation of its ignorance, and a just reverence for the teachings of nature. And medical men, with but few exceptions, have, ever since his day, been influenced by the spirit of the inductive method of research. It is not true that eclecticism is only understood and acted upon in France, as has been too peremptorily stated. There is not a physician of any standing in these United States, but what virtually and effectively, governs himself by the eclectic method. And what is meant by eclecticism? Simply, as Dr. Rush has so frequently reiterated in his writings, that we are not to be ruled by the name of a disease, but prescribe for it in accordance to the dictates of an enlightened judgment, operating on the present exigence of the case. Nor do we claim for Rush any merit of discovery on this point, for the wise and observant Sydenham had before him acted upon the same solid method of observation and induction. Sydenham avers that he deduced his hypothesis from observations of natural phenomena, so as to make the philosopher subservient to the practitioner; "Whereas," observes he, "to have set out with an hypothesis would have been as absurd in me, as it would be in an architect to attempt to cover a house before he laid the foundation, which only those who build castles in the air have the privilege of doing, as they may begin at which end they please."

And Cullen, in his Introductory Lectures, published by Prof. Thompson of Edinburgh, speaks thus of Sydenham: "Sydenham has given a model for the cultivation of the practice of physic, which has been followed by every good practitioner since." Thus it is, that from the example of Sydenham, and the general mode of philosophiziag established, the practice of physic is now, for the most, cultivated free from the attachments or prejudices of any sect. Even our systems are much enlarged in their general plan; and however they may differ from each other in particulars, this affects only weak minds with the spirit of a sect."

It is evident from these references and quotations, that eclecticism was well understood by Sydenham, Cullen and Rush. However superior the French physicians may be in anatomy and physiology, and however deeply versed in the appearances of diseased action left in the organs after death, yet as sound practical eclectics, they are far inferior to the American practitioners of medicine.

In all branches of human knowledge, which are of a progressive character, in which a great many collectors of facts are laboring to accumulate the materials of its advancement, there must, of necessity, be, from time to time, a plastic genius to mould into one consistent form all the scattered truths of the science, and to breathe into the mass a living, pervading philosophy that will beautify the science, with the attractions of a well proportioned scheme of knowledge. In his day, and to the extent of his opportunities of observation, Hippocrates was an eclectic, and so were Cul-

len and Rush; and we have in this era of medical inquiry, some eminent eclectics in medicine. Abercrombie of Scotland, Hall of England, Stokes of Ireland, Andral of France, Dewees of America, are fair specimens of that numerous class of eclectic practitioners, which are everywhere found in the cultivated ranks of the profession.

But medical practitioners are often heard engaged in eager, perhaps passionate altercation, respecting their experience, and is not this proof demonstrative that medicine is an uncertain science? Assuredly not. The personal controversies of the faculty, in reference to the best means of treating disease, only show us that individual differences of opinion will spring from a contemplation of the same phenomena by different minds. Original endowment, degree of culture, force of prepossession, and accidental association of ideas, will create discrepancy of opinion among men, in all the practical applications of knowledge.

Physicians agree in the statements of anatomical and physiological inquiry; and in their views of the ultimate action of remedies there is little division of opinion, and yet they may widely disagree in the inferential judgments which they entertain on the character of a particular malady and the best mode of conducting the treatment. The science of education is certain, and yet what a discrepancy of judgment does there exist on the best modes of communicating instruction to the opening mind of childhood. Chemistry is a science of great certainty, and yet it is not a perfect science. Some of its principles need further elucidation, and many of its facts a still more accurate examination. It has been the general opinion of chemists, till recently, that the same elements united in the same ratio, must always generate the same compound. But this opinion has been opposed and destroyed by the discovery of the fact that two or even more substances containing the same elements, in the same ratio, may exhibit chemical properties distinct from each other. These isomeric bodies present an anomaly in the science of chemistry, difficult of satisfactory solution.

The sciences of education, chemistry, and medicine, are neither of them perfect, but improvable and progressive sciences. The noble science of education developes in man the peculiar glories of an intellectual and moral nature; draws from the deep wells of the human heart, all those streams of moral excellence that refresh, fertilize, and beautify the otherwise sterile wilderness of life, and rouses into effective activity, those bright powers of intellect, which climb the starry heavens, penetrate the mysteries of nature and subdue the earth to the use of man.

The science of chemistry, by its analytic and synthetic processes dissolves and recombines at pleasure, the elements of bodies; educes new combinations of great value, from apparently useless substances, and seperates ingredients from their union with injurious or inert bodies. And

medicine is a science which subordinates all its acquirements to the great end of curing disease, or of alleviating those maladies which are immedicable.

There exists certainty in medicine, both in the principles of the science, and in the application of the art of curing disease, but this certainty is not of an abstract character, neither is it perfect and entire. Let us further examine the kind and degree of certainty attached to medicine, and the sources of that uncertainty which often besets its progress and impedes its usefulness.

In order that we may form a sound judgment on these points, we must inquire, with some particularity, into the nature and objects of medical investigation. All science is divided into abstract and natural. Abstract science has for its objects such primary existences and relations, as space, time, number, quantity; and from its very nature may be prosecuted by the mind independent of all outward phenomena. Abstract science employs symbols, to represent combinations of primary objects, by which it embodies its own steps of inquiry, to aid its progress and to communicate its conceptions.

The only perfect sciences are the abstract. The truth of mathematics is the harmony of thought and thought. Mathematics have nothing to do with causes. Philosophy is busied in the search after causes. In mathematics, the whole principles are given, and its procedure is therefore, merely explicative. Philosophy seeks its data, and its procedure is therefore amplicative. The truth of philosophy is the harmony of thought and existence, and it employs observation, experiment, induction and analogy to arrive at its results.

The instruments of calculation furnished by the mathematical and geo metrical sciences, are of infinite power, and absolute certainty for the service of all the other sciences. And the extent to which these instruments of calculation can be applied to the objects of sense, is the true measure of the perfection of the sciences,

The relations and properties of matter constitute the objects of sense.—The more simple the relations and properties of matter with which a science is conversant, the more perfectly will it be cultivated by a rigid application of the instruments of calculation. Now, medicine has to do not with necessary, but contingent matter. The field to be explored is that of probability, and it can not be traversed with any hopes of successful inquiry by an assiduous locomotion on the rail road of demonstration. The spirit of observation must pioneer the way, to detect the premises, and the power of experiment must co-operate in evolving the hidden causes of things. Then induction and analogy must be elicited and strengthened to work out the problems, the data of which have been furnished by observation and experiment.

Medicine is an imperfect science, first, because it treats of the relations and properties of matter in an organized form. These relations and properties are exceedingly complex, intervolved, and changeable. Organization implies complication, and vitality is ever accompanied by incessant mutation of action. The second source of the imperfection of medical science is the multiform variety of the objects of its study. The third reason of its imperfection is, that so many of the facts accumulated are not comparable and consistent. Thus, how numerous are the false and therefore worse than useless facts in medicine; how many imperfect, and therefore deceptive facts; how unmeaning many of its facts; and lastly, what wonderful, and therefore, merely curious histories have we in medicine.

But besides, medicine is imperfect, because it does not admit of the use of the most perfect instruments of calculation. We possess very few accurate instruments compared to the great number of objects to be examined. Facts existing in groups, a complication of circumstances, the blending of relations and properties, these present hard problems for solution, to the physician.

Life and its phenomena; disease, its causes, symptoms, nature and seat; the remedies to cure, and the agents to destroy; the law of reparation and conservation, and the law of decadence and death, working now in parallel lines, and now in antagonism, within the elaborate structure of the human frame; these must be searched into, and by severe analysis reduced to their elementary forms of truth.

In all the investigations of medical science, and in all the practical applications of the art of medicine, life, its essence, its mysterious origin, subtle presence and agency, its lodgment, and modes of diffusion through the organization, baffles and eludes the grasp of thought. Disease developes fresh mysteries in the body; how its causes operate, how it becomes hereditary; how it deranges the functions, and breaks up the relations and correspondencies of the organs, and how the structure passes through transformations, strange and fatal under its dominion; these questions so easily put, are of a character eminently adapted to task the most penetrating intellect for a true solution. In two of the elementary branches of medicine, comparative certainty, and plain demonstration obtain. Chemistry, which deals with the atomic affinities of matter, by isolating this one order of properties with which material substances are endowed, proceeds on a pathway of experiment, conducive in a most unambiguous degree, to sure and definite results. And anatomy, regarding the dead machine, can proceed from point to point, from structure to structure, along the whole composite organism, laying open the recesses, and elucidating in its steady walk of demonstration, all the vascular, nervous, muscular, textural, and bony elements of the human fabric. But the more simple ana-

tomical relatious and properties of the body, when lying inactive, unvitalized before us, assume new and intricate phenomena when pervaded and vivified by the plastic energy of life. Now, it is all a calculus of probabilities which is to guide us; the mean of all our observations has to be taken; no statical, or dynamical, or mathematical principles will avail in directing our inquiries.

Incapable of creating, by the force of excogitation, our science, as the mathematician does his science, by the power of thought, and unlike the astronomer, having no one law, like gravitation, to bind all the simple relations of matter in one harmonious system, medicine is, and forever must, like jurisprudence, remain an imperfect science.

The art of curing disease is restricted in its attainment of certain results, by the very character of the human mind, which is at all times liable to the illusions of prejudice and of sense; and were it possessed of the most perfect theory of life, and of disease, would often fail in making precise and sure applications of its knowledge to the case in hand. The remedial interference at the bed side which medical art makes, is often frustrated by the feebleness of the agents employed to arrest disease: or curative efforts on the part of the physician are thwarted by the individual conditions present; such as, some inscrutable peculiarity of temperament, or by the overwhelming weight of mental suffering. Besides, the very frail and dependent nature of man exposes him incessantly to the operation of external agents, and to the inwrought disturbances of ill balanced, nervous, and vascular systems, which inevitably, in numerous instances, aside from the imperfect condition of the art of healing, or the misapplied resources of medicine, tend to human dissolution.

Universal theories of life, and of disease, like universal medicines, are inherently spurious, and short-lived in their popularity. "In folly's cup still laughs the bubble joy." under the delusion, that such, from day to day, have been discovered. The theory of humoralism, grounded on false conceptions of life, and so darkening in its effects on the true mode of arriving at truth in medicine, long reigned dominant and supreme in medicine, and still it fondly lingers in the popular mind, and throws its delusive glare over every empirical pretension, which palms its nostrum on public credulity. The dogmatic and assumed catholic doctrines of the iatro mathematical school, of the iatro-chemical school, and of that of strictum and laxum, of spasm, of sthenic and asthenic diseases, of gastroenterite, and all such wide, embracing, comprehensive schemes of medical exposition, the profession, as a body, look upon with distrust, and regard them as unphilosophical and impracticable. Admitting the imperfection of the science of medicine, how can we receive any universal theory of disease, and any exclusive method of treatment, as founded in a just philosophy, and as expedient and safe for a practical guide.

A sort of undefined, vague imagination possesses some minds, that medicine is omnipotent, and that it is an opprobrium of the profession if any patient dies under the hands of the regular faculty. And grounded on this wild supposition of the absolute control to be exercised by medical skill in attacks of sickness is the proneness of many minds to be ensnared by the vapouring and ostentatious pretensions of any bold and specious adventurer in medicine. Grafted on the same propensity is the ready liability of the popular mind to be mislead by any novel plan of curing disease, which a daring empiricism may invent, or self-interest may propagate.

The practitioner of medicine has constantly two practical ends to attain in the discharge of his professional duties at the bed-side; the first is, the identification of disease, and the second is the appropriation of remedies. Diagnosis is the ground work of therapeutics. Pathology is the primary and most essential element of a correct diagnosis. With enlightened conceptions of the nature and seat of a morbid affection, the physician proceeds to the application of his curative agents. But, before he makes a selection of his means of cure, he should possess a just and precise view of the indication to be fulfilled. Therapeutic indications occupy a middle ground, which is illuminated by the lights reflected from a knowledge of disease, and from an intimate acquaintance with the virtues of the agents which are capable of changing, or arresting, the morbid movements going on in the system.

The diagnosis of disease is derivable from four distinct, and yet mutually related and dependent sources of information.

1st. The history of the case inclusive of the hereditary or acquired constitution of the patient, as far as we can ascertain; the congenitial and acquired tendencies to disease, by questioning the sick person in reference to his parentage, and previous habits and exposure. By inquiry under this head we learn whether he has been subject to attacks analogous to the one with which he is now affected, and by what means such seizures were removed.

2nd. By Symptomatology, which includes a careful examination of both the rational and physical signs of disease.

3d. By the effects of remedies which may have been employed.

4th. By pathological anatomy, or the lesions left in the organs by the fatal agency of the disease on the system.

Uncertainty and doubt may spring from these several sources of arriving at a correct knowledge of the existing state of the functions. The first duty of the physician in his investigation of morbid states of the system, is to determine whether it is a mere functional disease under which his patient is laboring, or whether conjoined with the disordered movements of function there exist organic lesions. Then again, he is to contemplate the disease,

in its relations of time, as well as in its relations to the different parts of the organism. If a local disease, he must discover whether such local affection is dependent upon a previous, and still existing constitutional derangement, exemplifying the constitutional origin of local diseases, so cogently and practically illustrated by Abernethy, or whether the local affection has induced deranged action in the system. If a man of earnest and penetrating capacity of mind, he will not be satisfied with the fact that in a given case the head, stomach, or other organ is deeply implicated in the diseased condition of the system, but will strive to find out by the history of the attack, whether there has been either an extension, superinduction, or substitution, of abnormal action, or a complication of these modes of irregular and disturbed operation of the vital powers. Thus, suppose the physician is called to see a patient in fever, affected with irritation of the alimentary canal, accompanied with copious alvine discharges, he would endeavor to find out whether this state of the bowels was the cause or effect of the fever, or whether the fever was not a mere superinduction, originating from a distinct causation. If the bowel affection originated from the state of the system, then it constitutes a case of extension of morbid action, from a constitutional derangement reflecting its morbid process on a very susceptible and sympathizing portion of the frame; but if the fever arose from the irritated condition of the bowels, then we have an exemplification of extension of morbid action from a point to the entire system, which general disordered movement may implicate other organs, or be connected with the extension of the morbid action of the intestinal tube to the liver, membranes of the brain, &c.

Substitution, or metastasis, of disease is very common. A man has rheumatism to-day, to-morrow he may have dysentery—next day rheumatism. Or a patient may have dyspepsia for some time, which by extension of irritation brings on a sub-acute inflammation of the lungs, and then the dyspeptic symptoms leave him, and he dies, perhaps, of the pulmonary disease.

Besides these important considerations, bearing upon the history of the case which we may be called to treat, we are not to pretermit in our brief analysis of the patient's disease the uncertainty which may spring from the inaccurate statements made by him of the etiology, or origin, and progress of his malady. Ignorance and prejudice always are in active play among the majority of mankind to mislead them in these respects. But there may be a wilful suppression of the truth in some instances, and in others there may be not merely a suppression of the truth, but a bold and positive averment of that which is false.

The symptomatology of disease may be the source of much incertitude, unless we come to the examination of every case of sickness which we

are called to treat with just, comprehensive, and accurate views of the structure and functions of the animal economy, and with authentic, practicable conceptions of general pathology. The physician who approaches the bed side with erroneous conceptions of disease floating in his mind can never make a true explanation of the symptoms, unless he chooses to disincumber his perceptive powers of such a distorting medium.

The principles or doctrines of general pathology which have been promulgated in the medical world from time to time, have exerted a very strong influence in the misinterpretation of the phenomena of disease. Let us select one or two examples as illustrations of this remark. The very fashionable doctrine of congestion is apposite as an instance of spurious pathology. Congestion, as understood by its modern advocates, means a pathological state essentially constituted of a morbid turgescence of blood in the veins. And that abnormal repletion of the veinous system takes place in the brain, lungs, and other organs, but to a more conspicuous and fatal degree in the portal circulation. Debility of the heart's action, induced by malaria, or other lethiferous agents, is the originating element of congestion.

Now, there are two questions to be answered before we can accede to these propositions. 1st. If debility causes the congestion in one case, why does not the same debility in the heart's action always bring on a congestive fever? Yet we often see debility of the heart's action without any symptoms of congestion. 2d. If congestion arises from debility of the heart's action, then we see not how any termination can be put to either, except by stimulating methods of medication, which we know are very often destructive in such cases.

The belief in the vis medicatrix naturæ, or curative tendency of nature, has led at times to a meditation on death. The advocates of the medicating, or restorative efforts of nature, grounded their position on this law of animated forms of existence,—that there was a strong and constantly operative principle at work to preserve the distinct form of animated existence in which this law was inherent. There is no doubt but what nature has incorporated into the very elements of all animated existence this primary principle, by which alone such existence can be preserved and continued.

But there is another law ingrafted upon this primary one, and that is the *vis desmoliens*, or destructive tendency of the actions of all living things. Why is it that death is perpetually making ravages among organized bodies, and why is it that disease—death's harbinger—is constantly doing its work of disruption among the forms of living organization? And why is it that we have such a complicated and diversified apparatus of means put in our hands by art for the mitigation of human maladies, and for the

temporary warding off the stroke of death? Nature falters and reels under the reiterated attacks made on her, and she calls with imploring voice on art to come to her rescue. And the very presence of the physician at the bed side is ample refutation of this idle and often mischievous notion of the remedial capabilities of nature in her struggles with the great law of destructive tendency, which in disease has already acquired a predominance over the other law of living beings—the law of self preservation.

Another pathological error, which rises in gigantic magnitude on the field of practical medicine, is that of chemical changes in the blood, originating morbid phenomena. Venerable for its antiquity in the eyes of those who love antiquity more than truth, and specious and attractive to those who prefer opinion to fact, the humoral pathology is found insinuating its deteriorating influence into the whole history of our science. Through all the succession of opinions, from the time of Hippocrates to the period of the publication of Glisson's treatise "De Ventriculo et Intestinis," in 1671, the theory of the organization of diseases in morbid conditions of the fluids of the body was the exclusive dominant pathology. The mathematicians, the chymists, and the metaphysicians, however they differed on subordinate points, all concurred in placing disease exclusively in the blood. Toward the close of the seventeenth century the illustrious Baglivi was born, and though, like the still more illustrious Bichat, he was cut off at an early age of life, he, in part, redeemed medicine from the oppressive weight of the humoral pathology. But still there are a few dregs of this cup of medical error and delusion left, though thanks to a better philosophy, however earnestly enlightened practitioners of medicine may speculatively defend the doctrines of the humoral patholgy, they ever keep those idle plausibilities in abeyance when they approach the bed side.

Careful observation of the effects of remedies is another method by which we arrive at a correct diagnosis of the true nature and real state of the patient's disease. But in scrutinizing the effects of our plan of treatment, we must not omit those adventitious circumstances which so frequently act in modifying the results. These are age, sex, idiosyncrasy, constitution, symmetrical peculiarity, temperament, climate, mental affections, the form of exhibition of the medicine, and the part of the body to which it may be applied—these circumstances, independent of the kind and degree of morbid action, to a greater or less extent, modify the agency and effects of our remedies.

The practitioner of medicine, after the formation of correct opinions on the nature and varieties of disease, grounded upon an enlarged cultivation of his profession, proceeds, in the discharge of his responsible duties, to make a practical application of such general knowledge to the cases of individual disease he may be summoned to treat. He must, from his previ-

ous acquaintance with the animal economy in health, know how to detect deviations from a physiological to a pathological condition, and he must know the therapeutical powers of the remedial articles which the case may call for, and be able to wield them without hesitation. But let him ever keep up in his mind the distinction which obtains between the physiological and therapeutical operation of his remedies. All articles of the materia medica are but relative agents; that is, their peculiar curative powers are related to certain states of the body; and these related curative powers we ascertain by a careful examination of their effects in different relations of function, and organic movement of the system.

The value of pathological anatomy as an instrument of discovery of the true pathology of disease is universally admitted. Here a deceptive reliance may rest upon effects for causes—we may be treasuring up the important facts of pathological anatomy, whilst we are overlooking the history and symptoms of the disease of which the patient died, and the effects of the remedies employed for his recovery. Combining in a just and thorough consideration these four elements of diagnostic knowledge, we fairly arrive at a point at which we may pronounce what the indications of treatment are in any case of disease. And here is the final test of our previous acquisitions on the general theory of disease. Those pathological speculations which will not avail in guiding our exploring way in search of correct indications of treatment are not worth a place in our credence. Take the vis medicatrix naturæ, and endeavor to make it a "guide, philosopher, and friend" in a case of irritation, inflammation, or fever. Why has nature instituted a destructive process at all, and if she is trying to rid herself of her own false step, why induce such an inordinate disturbance to medicate the body?

Boerhaave, and other distinguished authors of that school, indulge in many very gross and absurd speculations on the pathology and therapeutics of diseased fluids. In his practical aphorisms he talks very learnedly and very profoundly, with a correspondent degree of obscurity, of stagnations, obstructions, coagulations, resolutions, thickenings, and attenuations, and upon these suppositious states of the blood he erects his indications of cure. "If an intermittent," says he, "is not malignant, it disposes the body to a long life," for it "cleanses it of old and rank diseases." Upon the same humoral notion King James I. of England could repeat, whilst shaking with a vernal intermittent, which killed him,

> "An intermittent in the spring,
> Is physic for a King."

As far as the true indications of cure are concerned, there is not one malady incident to man, the treatment of which can with safety be conduc-

ted on a judgment of the case grounded upon the pathology of diseased fluids. Dr. Paris admits this when he remarks, in reference to Cullen's classification of the articles of the materia medica, "that the very basis upon which it rests is a mere gratuitous assumption, viz: *that certain medicines act on the fluids of the body.*"

Entertaining the general consideration that all morbid phenomena arise from irritation, inflammation, and fever, we shall be prepared, when we approach the investigation of disease in our clinical experience, to generalize correctly, and without distraction of mind or incertitude of judgment, on the variety of manifestations of organic and functional disturbance, which may be brought under our therapeutical control.

Is it a case of simple nervous irritation? we have our revulsives, or counter-irritants, tonics, and anodynes, for its removal.

Is it a case of inflammation of an acute character? then bloodletting and other evacuants come into requisition.

Is it a case of fever originating from a malarious agency? then we summon to our aid a variety of therapeutic resources. The whole range o the materia medica must be made available to the successful treatment o a severe and protracted attack of bilious remittent fever. Depletion, vascular and intestinal; a promotion, or restoration of the cuticular, hepatic, and renal secretions; derivation of action by revulsive medication; repression of inordinate heat by a judicious use of cold water to the surface of the body; anodynes to soothe nervous irritability; alterants to arrest lesions of secretion and nutrition, which are so apt to arise in the progress of the fever; and tonics to sustain the faltering energies of life. These measures and modes of medical interference must, in ever varying degrees of activity, be made instrumental for the cure of this severe constitutional malady.

Thus we have therapeutic agents adapted to irritation, inflammation, and fever, which, judiciously selected and combined, can be made apposite to the fulfilment of each indication, as it is revealed by disease.

Irritation, inflammation, and fever—these constitute the ground work of our pathology, as they are seen in isolation, or interchangably running into, and complicated with each other.

Nor are we to build our indications upon a too exclusive view of any case, even though it may have partook at first largely, or almost entirely, of either irritation, inflammation, or fever. After a free employment of the lancet in an inflammatory attack, we find it necessary to quiet nervous irritation by anodynes; or we may deem it expedient to combine calomel and opium in order both to allay irritation, and promote the hepatic and other secretions, by which process we carry off the remains of inflammation.

These considerations, with others of a like character, direct us to the avoidance of those sources of uncertainty which result from the modes in which medicinal substances should be administered. As a general rule, simplicity in our prescriptions should be maintained; but frequently we shall find the maxim hold true in pharmacological substances, *vis unita fortior*. Our indications may be simply to deplete by emesis or catharsis, and here one article, with or without an adjuvant, is required. But should irritation in the alimentary canal be present, then we unite an antispasmodic, or an anodyne, with the cathartic.

There are four errors committed in the exhibition of medicines, to which I will advert. First—polypharmacy, or excessive multiplication of articles in one prescription, or in rapid succession; second—a severe and injudicious simplicity; third—excessive or deficient doses; and fourth—a union of incompatible substances in the same formula.

There are sources of uncertainty in the curative powers of our therapeutical resources which often play an operative part in the frustration of our best concerted schemes of treatment. These are found, first, in the conduct of the patient, or his friends or attendants, from a want of punctuality in giving the medicines ordered by the physician, or in abridging or exceeding the quantity, or periods, dictated; second, in improprieties of diet; and third, in the state of the patient's mind. There are patients who,

> "Ingenious to torment themselves,
> Grow pale at hideous fictions of their own.
> The most important health, that of the mind;
> When invaded thus, the conscious body
> In sympathetic languishment, declines."

And there are injudicious friends who too often obtrude their unsolicited advice upon the agitated mind of the sick, and who, either by direct aspersion, or sly insinuation, subvert the confidence of the patient in the skill of his physician. By this disingenuous conduct on the part of friends, the medical practitioner is deprived of the cheering approval and implicit submission of the patient, and the sick man is cheated of the invigorating influence of hope and faith; and a disheartening anxiety robs the medicines prescribed of all their curative power.

But, gentlemen, amidst all these sources of uncertainty, medicine is not a fallacious science, whose basis is error, and whose superstructure is mistake and chance. Difficulties press us on all hands; life is frail; the laws of organization difficult to comprehend: diseases are numerous and diversified; their prognosis hard, in many instances; and therapeutics yet incomplete. Besides, human judgment partakes essentially in its operations in

medicine of the character of man—fallible, erring, easily misled, and too often pertinacious of prejudice. Still we stand on the firm ground of a rigid inductive philosophy—in a territory of certainty and practical wisdom, surrounded by the trophies of victory won by our science over disease and death. Encouraged by what our profession has achieved for the good of the race, let us go on to higher points in that elevated range of investigation which lifts its inviting summit before our eyes.

Animated and sustained by the love of science, by philanthropy, and by patriotism, let us strive together in a noble race of emulation for the advancement of medicine to a more elevated sphere of certainty and usefulness.

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## SURGERY AND OPHTHALMOLOGY.

ART. 2.—*Rhinoplastic operation.* By J. S. UNZICKER, M. D., of Cincinnati.—Catharine C———, aged 20, had lost the ala and part of the side of her nose in childhood, after an attack of measles, by ulceration. After the surrounding cicatrices were removed, a flap was taken from the cheek, and united by very fine insect pins and twisted suture; eleven of these were necessary for the union of the flap and wound of the cheek.

Forty-eight hours after the operation the pins were removed, but the sutures left till next morning, when all had united by first intention. Fourteen days after the operation the connecting point was divided and extirpated.

Up to this time the nostril had been daily filled up with fresh lint, but afterwards a piece of goose quill was substituted until the inner surface had healed over.

*Extirpation of a Cancerous Tumour of the Tongue.* By the same.—Mrs. B———, aged 49, had a tumor of her tongue, on the left side of the raphe, about one inch back from the tip. It presented a dark, livid appearance, was unattended with pain, and extended down through two thirds of the thickness of the organ.

The operation was performed by a V incision down to the mucous membrane, which was left entire. This triangular piece, including the tumor, was then removed. Very little hemorrhage followed; only one artery was tied. The wound was then brought together by four insect pins and twisted suture. Seventy-seven hours after the operation, all these

were removed, when it was found that the wound was perfectly united, and the lady left on her journey home.

The advantages these insect pins have over the interrupted sutures are:

1. A more close and accurate contact of the wounded edges, which is consequently followed by the quickest prima intentio.

2. They produce less irritation, and leave no such marks as are often seen from the ulceration caused by the latter.

3. Protection of the wound against the access of air, without the application of lint or adhesive plaster being necessary.

4. The finest cicatrices which it only leaves.

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ART. 3.—*Ophthalmic diseases in China.* By WM. B. DIVER, M. D., of Cincinnati.—The extensive prevalence of diseases of the eye among the Chinese has, of late years, attracted the attention of philanthropists and medical men in England and the United States, by whose liberality several large hospitals have been established at important points in the Empire.

An Ophthalmic Hospital was founded at Macao in 1827, by T. R. COLLEDGE, ESQ., Surgeon to the British Commission in China. This institution became the topic of conversation throughout the provinces, and praises and thanks were heaped upon its proprietor by the friends and relatives of those who received its benefits, as well as by the individuals themselves, who had felt his "healing hand."

Up to 1832, more than four thousand indigent and diseased Chinese had been relieved of various maladies, and many restored to sight, by the benevolent exertions of a single individual.

The success of the hospital soon attracted the attention of the foreign community, and many individuals generously came forward and voluntarily contributed to promote the good object; so that in a few years upwards of $8,000 were given by the foreign residents alone.

Encouraged by the successful operations of this institution, a similar hospital was established at Canton, 1835, by Dr. PARKER, whose reports are familiar to the profession in the eastern cities.

The dense population of Canton rendered it probable that a single class of dieases would furnish as many applicants as could be treated and accommodated; it was designed, however, to admit exceptions in cases of peculiar interest and promise. Diseases of the eye were selected as the

most common in China, and being a class in which the native practitioners are most impotent, the cures, it was supposed, would be as much appreciated as any other.

In 1838 an ophthalmic hospital was established at Macao, by a society constituted of a large number of wealthy and respectable men in China and Great Britain; and in the following year the writer was elected a medical officer, and appointed to take charge of the institution, a report of which was published in the "Lancet," Vol. II.

The island of Chusan having fallen into the hands of the British forces, it was judged desirable by the executive committee of this society to send one of its agents to Tinghae, the capital, whith the view of establishing a hospital there for the relief of the natives, and for carrying on the objects of the society.

Accordingly, WM. LOCKHART, ESQ., M. R. C. S., commenced operations at Chusan September, 1840, and in the short space of five months, ending Feb. 22, 1841, attended to 3502 patients. This enterprise was suspended by the evacuation of the island on the part of the invaders, and the repossession of it by the former owners.

The following statistical account of the cases treated in these several institutions exhibits the vast extent of ophthalmic disease among the sons of Han.

*Report of the Hospital at Canton.*

| Year. | Total of diseases. | Diseases of the eye. |
|---|---|---|
| 1835–36 | 2430 | 2189 |
| 1837 | 1602 | 1460 |
| 1838 | 1539 | 1304 |
| 1839 | 771 | 415 |

*Report of the Hospital at Macao.*

| Year. | Total of diseases. | Diseases of the eye. |
|---|---|---|
| 1839 | 700 | 357 |
| 1840–41 | 1470 | 342 |

*Report of the Hospital at Chusan.*

| Year. | Total of diseases. | Diseases of the eye. |
|---|---|---|
| 1840–41 | 3502 | 1452 |

Since the occupation of thc island of Hong-kong by the British in 1841, the hospital has been removed from Macao to that place, under the charge of B. HOBSON, ESQ., M. R. C. S.

The question as to the causes of the extensive prevalence of ophthalmic disease among the Chinese is an interesting one, and has been frequently proposed to me by surgeons in the East.

One of the most fruitful sources of affections of the external coats and appendages of the eye is the practice of the *barbers*, who, when they have shaven the heads of their customers, perform the painful and unnecessary operation of cleansing the eye by everting the lids and brushing them over with a probe and a camel's hair pencil. This is done so frequently that the conjunctiva becomes highly inflamed. Subsequent neglect or improper treatment results in opacity and ulceration of the cornea, nebula, pterygium, entropium, staphyloma, &c.

Another very common cause of ophthalmia is the custom, universally observed, of burning to their deities incense sticks, which emit a very pungent smoke. No stranger can pass through the streets of Canton in the evening without being almost blinded by the smoke which issues from the numerous altars and houses in the densely populated streets. The annoyance, indeed, is so great, that the visitor is sometimes forced to cover his face and retrace his steps as fast as possible. And yet the inhabitants, from long habit, are perfectly contented to believe their lot the happiest on earth, although they suffer much from granular lids, acute and chronic ophthalmia, brought on by this religious rite. Catarrhal and strumous affections of the eye are very common, and the result generally of carelessness and a vitiated constitution. During the active operation of the hospitals at Canton and Macao, 569 cases of cataract came under treatment, in all of which, with but one exception, I believe, the operation of couching was performed; in the exception alluded to extraction of the lens was performed, but without success.

The pathology and treatment of the cases generally differed in no essential particular from that of European hospitals.

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## MIDWIFERY.

ART. 4.—*Irregular contraction of the uterus during pregnancy.*—Mr. Stewart, in a paper entitled "Statistics of Obstetrics," published in the *London and Edinburgh Medical Journal*, in adverting to some of the causes of tedious labor, signalizes as one of the most frequent causes, that irregular form of labor, where the patient suffers pain to a severe ex-

tent, without labor progressing in the same ratio; or, in other words, where deficient or deranged uterine action is the cause of the difficulties and delays experienced in parturition. He illustrates this doctrine by the case of a patient to whom he was called one morning, when labor appeared to be progressing rapidly; the pains were severe, and of an expulsive character; the os uteri dilated to a considerable extent; the presentation natural, and the pelvis well formed. The liquor amnii escaped soon after, the head descended a little, having just entered the brim of the pelvis, when all at once the pains began to alter in character, and, instead of being expulsive, they became of that description designated by patients as tearing pains without any force. Matters continuing thus for six hours without any progress being made in the labor, Mr. Stewart bled her freely to syncope, and gave forty drops of laudanum, but ineffectually. The hardness and prominence of the uterine tumor suggested fears as to the safety of the organ, and the forceps were applied, but the labor could not be thus terminated. Eighty drops of laudanum were then given, and on the reapplication of the forceps, during an interval of pain, the head was brought beyond the os externum, when the same opposing force appeared to be again brought into play, the pains returned as before, and the further extraction of the child was delayed for upwards of an hour. When born, the child was dead. On examination, the head was found to be well formed and sound, but the body appeared as if it had been tightly grasped round the shoulders and back, and round the pelvis.

Dr. Wilson adduces a case where the uterus was ruptured, and where every attempt at delivery by the forceps proved abortive, even when the patient was in a more sound state: and mentions that after death the Cesarian section was performed, when the uterus was found firmly contracted round the body of the child, and completely adapting itself to the inequalities of the child's surface, thus embracing it so powerfully as to form the only obstacle to delivery. Dr. Wilson, in a paper published in the *Glasgow Medical Journal* fourteen years ago, attributes the cause of delay in this case to irregular contraction of the uterus, the transverse muscular fibres of that organ not acting synchronously, and in a subordinate degree to the longitudinal fibres. When the transverse fibres act alone, expulsion of the uterine contents cannot take place, the expulsive process being best effected when the longitudinal fibres are acting powerfully, the transverse action being also carried on in a subordinate degree.

Mr. Stewart has found blood-letting the best remedy he could employ in these cases, with the sole exception of the one just narrated.—[Med Times, from Lancet.

ART. 5.—*Œdema of the os uteri.*—Mr. Stewart draws attention to the soft, flabby, and œdematous condition of the os uteri, as a cause of tedious dilatation, and consequently of retardation of labor. This state is generally induced by the early rupture of the membranes, owing to which the cervical portion of the uterus is compressed between the head of the child and the pubes; and the return of the fluids being obstructed, the os uteri becomes thickened, and its dilatation is in consequence extremely slow. In a case of this kind, which occurred to Mr. Stewart, that of a woman who had been in labor all night, a midwife attending her, he found the anterior lip of the os uteri still covering part of the head of the child, while the posterior was completely dilated. The parts were much swollen, and painful to the touch, and the woman was undergoing the most severe suffering.

The treatment he adopted was as follows:—previously to a pain coming on, he introduced his two fingers under the edge of the os uteri, and when the pain came on, gently raised them. By continuing this plan during the occurrence of three pains, the head of the child got completely disengaged from the uterine cavity, and the remaining part of the process was speedily accomplished. The patient suffered afterwards for some time from pain in the os uteri and purulent discharge, doubtlessly brought on by the continued pressure of the uterus between the head of the child and pubes. This plan of treatment is that advised by Dr. Gooch, by whom this condition of the os uteri is clearly described. It is only in the thick, spongy, and œdematous state, that this kind of artificial dilatation can be of service.—[Medical Times, from Lancet.

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ART. 6.—*Artificial dilatation of the os Uteri.*—Dr. Breen is of opinion that artificial dilatation of the os uteri is requisite in some cases, as by it much suffering may be prevented, and labor terminated at a much earlier period than would otherwise be the case. He thinks that artificial dilatation should not be attempted for at least ten hours after the real commencement of labour, no matter what the duration of spurious labor may have been previously. When this measure is called for, the membranes will be usually found ruptured, but not universally so. Two fingers are to be introduced, either between the os

uteri and unruptured membranes, or, if ruptured, between the os and presenting part of the child. The fingers are to be used either for the purpose of dilatation, or as a wedge, to resist the coming down of a flap of the cervix of that viscus. Above all things it is particularly to be kept in mind that the fingers are to be quiescent in the interval of the pains, and to be used only during the most severe portion of this action. By this proceeding no additional suffering will be caused to the patient. About two hours will be usually found sufficient to obliterate the undilated cervix, but the attendant need not be anxious to complete this measure within so short a time. He may occasionally cease from his toils, and watch what nature be capable of effecting. By following these rules he will avoid the risk of increasing the tendency to inflammatory action, which is always to be dreaded when severe labor is complicated with a long duration of that process. Blood-letting, although not contra-indicated, need not in general precede artificial dilatation. Dr. Breen supports his views by quoting the opinions of other writers.—[Med. Times, from Lan.

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## ANATOMY AND PHYSIOLOGY.

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Art. 7.—*The Function of the Lymphatic Vessels.* By Dr. Willis. Dr. Willis is of opinion that the *lymphatic* vessels, or *absorbents*, as they have been termed, perform the same office for the deeper tissues, thut the sudoriparous glands perform for the superficial, namely, the abstraction of a certain quantity of the watery element of the blood, for the specific purpose of rendering the returning stream of greater density than the outgoing. To effect this object, he *believes* they possess an especial elective and divellent power, powers, in fact, similar to those enjoyed by glandular organs, by which they separate from the blood, and prepare the various fluids which are called their secretions. The lymphatic vessels may, in fact, he says, be viewed as the essential elements of an universally disturbed gland. Their walls and sacculate commencements have been shown by the latest and best observers, to be composed of an aggregation of granular matter, of nuclei, and of cells in various stages ot development, precisely similar to the ultimate elements of every known secreting organ. Here, as well as elsewhere, nuclei in a ceaseless state of reproduction, attract a certain quantity of granular matter about them,

and then they become surrounded with a delicate envelop filled with fluid, —they have grown into cells; and these having attained maturity, and being then in contact with the internal surface of the lymphatic vessel, in whose wall they have grown, give way, and shed their contents into its cavity. The secreted fluid, in reference to the lymphatic system, is the lymph, a fluid having on an average about 96 1-2 per cent. of water, and 3 1-2 per cent. of solid matter in its constitution, this solid matter being identical in composition with that of the liquor sanguinis. The lymphatics, then, or to speak more accurately, the cells of which their walls are composed, in the course of their evolution, exert a special affinity for the watery element of the blood; and, abstracting this from the fluid that is circulating in the capillary arteries, they in the same proportion inspissate the current which is returning to the heart in the veins, and thereby endow it with powers of imbibition, or endosmose, to effect a ceaseless and rapid change in the plasma, which is transuding the walls of the arterial system at every point. The lacteals take up the chyle in the same way that the lymphatics absorb the lymph in other parts of the body. The lymphatics of the intestines begin in the form of cœcal sacs, or canals, as elsewhere, and the only difference observable between their structures, and that of the lymphatics generally, appears to consist in the higher development of the essential elements of the system—the nucleated cells.—The absorption of the chyle is readily to be explained in this way; the substance of the intestinal villi, where they are met with, that of the spongy tissue which still forms the inner layer of the small intestines, where they fail, like the substance of other tissues, is in a state of perpetual growth and decay. The decay here, as in glandular organs generally, takes place in the interior, towards intercellular channels or ducts; in the case under consideration, towards lymphatic or lacteal vessels. But cells of which the intestinal villi and pulpy inner membrane of the bewels principally consist, being evolved in mediate contact with the chyme, are penetrated by some portion of this; they gradually attain maturity, and then they give way and discharge their fluid contents, mingled with a peculiar granular matter, into the ducts with which they are in relation. The fluid contents are the chyle, the ducts are the lacteals. The contents of the nucleated cells of the intestines, it is to be observed, are only white and milky when there is chyme, and that even of a certain description, in the intestines. When there is not any chyme present, their contents are transparent and colorless, or nearly so, as is also the product of their maturity and rupture, then entitled *lymph*, and not *chyle*. Chyle only

differs from lymph in containing a relatively larger proportion of albuminous and fatty matter, which is exactly what might have been expected in the fluid that is bringing fresh pabulum for the use and maintenance of the economy, albumen being the representative of the azotized fat of the non-azotized elements of the human body. The liquid carried by the lacteals is of much less density than the liquor sanguinis. The anatomical distribution of the lymphatics, Dr. Willis considers to be in perfect harmony with the views he has thus promulgated as to their physiological action, and he further illustrates them by the disturbance that ensues in the system generally, upon any implication of the functions or structure of the serous membranes, &c.—*Med. Times—from Med. Gazette.*

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ART. 8.—*London Medical Society.—Mesmerism.*—The subject of mesmeirsm was introduced by Dr. Clutterbuck, who enquired the result of the visits paid by several members of the society on the previous Monday evening, to the Southwark Literary Institution, on which occasion Mr. Vernon delivered a lecture on mesmerism, which he illustrated by experiments.

Dr. Willshire, in describing what took place, stated that all the experiments were decided failures. A medical gentlemen, of the name of Burt, brought a very complete mask, lined with black velvet, which extended from the superior part of the brow to the chin, and was secured over the face by several ribbons. It was so contrived as to render vision impossible. Mr. Vernon at first objected to its use, as the wearing the mask would render the face very hot; the slit for the mouth was very small, and there would not be a sufficient degree of lucidity. The opening for breathing was enlarged, but still Mr. Vernon objected, when Mr. Rendall, the chairman, having assumed the mask, declared he could wear it for twenty-four hours without inconvenience. It was then tried on several girls who had been previously mesmerized, and who, after fumbling about the mask for some time, were utterly unable to read. Mr. Vernon explained the failure by attributing it to want of sufficient lucidity. A similar failure occurred with a boy who was afterwards mesmerized. The phenomena of *clairvoyance* could not be produced in any one of the persons wdo were subjected to Mr. Vernon's manipulations.

Dr. Waller stated that he was deputed, at a large meeting at Crosby Hall, to watch the experiments, and that they all failed; he mentioned an

experiment with regard to catalepsy, which was supposed to have been produced by Mr. Vernon, on the person of a little girl, and whose arm, when fixed, Mr. Vernon defied any one to bend. He (Dr. Waller) tried to do so, and succeeded very easily. The other experiments attempted by the lecturer proved to be equally unsuccessful. Although he looked upon these exhibitions as utter deceptions, he still thought there was something in the science or art, which could not be explained.

Mr. Clarke, in expressing his disbelief in mesmerism, referred to the experiments performed in Bedford Square some years ago, with Dr. Elliotson and the O'Keys'. He mentioned that Dr. Elliotson had mesmerized these girls at the distance of three hundred feet, and yet he had recently failed altogether in producing that effect on some of the sisters, whom he had accidentally encountered in Tottenham Court Road.

Mr. Dendy, who confirmed all the statements made by Dr. Willshire, stated that he visited the Southwark Literary Institution purposely to develope the imposture. The experiments on that occasion were failures in every respect. He (Mr. Dendy) thought there was a great deal in mesmerism, but nothing at all in animal magnetism. He considered Vernon to be a thorough impostor, and one who ought to be exposed.

Dr. Roberts, Mr. Crisp, and other members, added their testimony against mesmerism, which Dr. Roberts said he looked upon as a piece of humbug.—*Medical Times.*

# REVIEW.

*Recherches sur la quantite d'Acid Carbonique exhale par le poumon dans l'espice humaine.* Par. M. M. ANDRAL et GAVARRET. (*Extrait des Annales de Chim. et de Phys.* 3*me serie, t. VIII.*) Paris, 1843. pp. 30.

***Researches on the quantity of Carbonic Acid exhaled by the lungs in the human species.*** By M. M. ANDRAL and GAVARRET.

There is no subject, within the whole range of physiology and pathology, which is more worthy minute and accurate study, than that of the various circumstances attending and affecting the constant exhalation of carbonic acid from the respiratory organs of living animals.

It has long since been ascertained that this exhalation is a necessary accompaniment of their existence; and enlightened physiologists have generally agreed that it is mainly in this manner that the constituent carbon of the living body, after union with the oxygen supplied in respiration, is removed from the tissues to give place to new portions supplied by the food, and that thus are brought about the metamorphoses or changes of the elements of the living compounds by which vital action is always attended.

This continual oxydation of carbon, (and probably also of hydrogen,) in the living animal—analogous to what occurs in the ordinary combustion of our fires—is now believed, by a prominent class of philosophers, to be the only true source of animal heat. And in view of the constant association of this oxydation with vital action, the celebrated Liebig has enunciated the theory, that vital motion of every kind, whether cerebral or muscular, is dependent on the same process of change and oxydation. This theory has also been ably advocated by M. M. Dumas and Bossingault, in France; than whom none stand higher as industrious and successful chemical observers.

The mutual operation of the elements of the food and atmospheric oxygen in the living body, by means of which, it is believed, heat and vital force are produced, have been compared to those of the fuel and the air supplied to the furnace of the steam engine, which, by their combustion,

produce not only heat, but force, in an amount proportional to the quantity of fuel thus oxydized.

M. Dumas, in his "Lectures on the chemical statics of organized beings," goes so far as to indulge in the following "reflection:" — "To ascend to the summit of Mont Blanc, a man takes two days of twelve hours. During this time he burns at an average 300 grammes* of carbon, or the equivalent of hydrogen. If a steam engine had been employed to take him there, it would have burnt from 1000 to 1200 to accomplish the same work."

"Thus, viewed as a machine, borrowing all its power from the coal that it burns, man is an engine three or four times more perfect than the most complete steam engine. Our engineers have, therefore, still much to do; and yet these numbers are quite such as to prove that there is a community of principles between the living engine and the other; for if we allow for all the inevitable losses in the steam engine, which are so carefully avoided in the human machine, the identity of the principle of their respective powers appears manifest and clear."

The theory of Liebig, thus most mechanically symbolized by Dumas, has caused quite a sensation in the scientific world. It is at once new, startling, and simple, corroborated by numerous ascertained facts and many analogies. But it must never be forgotten that it is as yet *only a theory*, stated by its author to be based on our present imperfect knowledge, and only to be permitted to stand until contradicted by some new truth ascertained in the progress of discovery; for no theory, from whateve, elevated source, although sustained by hundreds of facts and analogies can, in the present condition of philosophy, be sustained against a single ascertained truth with which it cannot be made to accord.

The theories of Liebig, while they will undoubtedly "mark the commencement of a new era in physiology," by the stimulus which they will give to accurate research, instituted to sustain or refute them, are, by their verisimilitude itself, calculated to lead the incautious into error; by inducing them to take these *probabilities* for the basis of reasoning or of medical practice; in the forgetfulness of the fact, that in all researches into the operations of nature, we must proceed entirely by the humble path of observation. Nothing can be predicated from the known of the unknown; and although a general adaptation to each other is to be observed in all natural agents and processes, yet, contrary to what is the case in mathe-

* The French gramme is nearly 15½ grains Troy.

matical science, the operations of our reasoning faculties, exerted on a thousand positively ascertained truths, can never, without the aid of observation, enable us to supply a single new one.

The general remarks of the great Swedish chemist* on the present condition of animal chemistry, are peculiarly appropriate in this connection. "The moment approaches, for animal chemistry, in which the experience that has been acquired by the student of the metamorphoses which occur in the organic products of our laboratories, will conduct us to chemical speculations on those which operate in the living body, and in which chemists, who do not perceive the necessity for profound, special, and detailed knowledge of each part of physiology in particular, will boldly indicate to us what are the chemical phenomena that take place in the operations of the vital force. This easy species of chemical physiology is created on the writing table,—it is the more dangerous as it is developed with the greater genius, for the multitude of readers are not able to distinguish that which might be exact, from what is only possible or probable; and in this manner they will be led astray by probabilities,—they will consider them as realities, and, once admitted into chemical physiology, considerable effort will be required to banish them. The facility with which a chemical physiology may be made in this manner, by those who have a great experience in chemistry, and the faculty of combination largely developed, and probably the desire to be the first to give to the world this *physiology of probability*, will cause to arise an emulation for the priority, which will hasten the false direction of science."

Notwithstanding the predictions and the fears of Berzelius, but little danger is to be apprehended, in the present condition of science, and the present practical age, from the publication of theoretical views. Plausible, or even fascinating, as they may be, they will not mislead the real promoter of science, who never gives to a theory any but a provisional station. The first question which will arise in his mind is, as to their truth and accordance with nature, and the first effect they will produce will be to cause him to examine minutely into the existing phenomena on all the points where our knowledge is imperfect. Thus theory, going in advance of investigation, will be the handmaid to discovery; as she always has been when properly appreciated. No one will be deceived, or led into error, but the speculative and the unscientific, and these never aid, except incidentally, in the progress of knowledge.

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* Berzelius. Rapt. annuel sur les proge de la chim. Presentee le 31 Mars, 1842.—Paris, 1843. p. 309.

To the admirable publications of Liebig and the lectures of Dumas are we doubtless indebted for the principal motive to the interesting experiments detailed in the brochure of M. M. Andral and Gavarret, the results of which corroborate in a remarkable manner the theory to which we have just alluded.

Lavoisier and Seguin, Davy, Allen and Pepys, Dulong, Despretz, Menzies, and a number of other chemists, have endeavored to determine the amount of carbonic acid habitually evolved from the lungs of living animals, and particularly of the human subject; but while they have established the great amount and the universality of the exhalation, their results are so various as to quantity that new investigations were required, to ascertain the causes of the discrepancies observed, and to discover the physiological or pathological circumstances on which they are dependant; whether age, sex, constitution, rest or motion, sleep or waking, food, drink, or atmospheric influences, &c., or the various forms of derangement or disorganization which constitute disease.

This herculean task, which must be performed, with the aid of the improved processes of chemistry, and in the true philosophic spirit, before this subject can be fully understood, has been commenced by the authors of the memoir the title of which is at the head of this article, in the performance of seventy-five experiments, with a view to ascertain the influence af age, sex, and constitution on the exhalation in question.

The subjects of these observations were sixty-two in number, thirty-six males and twenty-six females, of all ages from eight to one hundred and two, and of various constitutions. The mode in which the experiments were made differs from that adopted by all previous investigators on this subject; being admirably calculated to remove all the sources of error which might exert an appreciable influence on the results.

The persons submitted to these experiments were caused to breathe, in the natural manner, in a copper mask fitted closely on the face by means of an edging of caoutchouc. From the mask a tube passed, which led to the interior of a series of glass balloons, of the united capacity of 140 litres,* in which a vacuum had been produced. Two other tubes, opening within the mask on each side opposite to the angles of the mouth, communicated with the external atmosphere, and were provided with light valves which prevented the escape of the expired air. When the communication between the interior of the mask and that of the vacuum globes was

* The French litre is a little more than a quart.

made, by means of a graduated stop-cock; the subject breathed in the current of air, which was forced, by the pressure of the atmosphere, through the cavity of the mask into the vacuum of the receiving balloons. The current was graduated so as to permit breathing to go on without any inconvenience, or any effort to aspire air, or to expel the products of respiration, which were thus carried by the current into the system of vacuum globes.

At the end of the experiment, which lasted from eight to thirteen minutes, and in which about 130 litres of air was collected, the temperature of the collected air was allowed to fall, and its volume accurately ascertained by means of an attached barometer; allowance being made for temperature, the tension of the vapor of water present, and the capillarity of the barometer tube.

In order to estimate the quantity of carbonic acid evolved from the lungs of the subject during the time of the experiment, the collecting balloons were now put in communication with another series of glass vessels, in which a vacuum had been produced. The air which passed into the latter from the collecting vessels, was caused to pass consecutively through two systems of tubes—the first containing sulphuric acid, to absorb the moisture, and the second a solution of caustic potash, which removed the whole of the carbonic acid. When a certain amount had passed over, which generally amounted to 40 litres, during a space from 12 to 15 hours, the increase of weight acquired by the potash tubes, ascertained by weighing them, indicated the relative amount of carbonic acid collected in the experiment; subject to no other source of error than the small amount of this gas naturally contained in atmospheric air, which. being the same in all the experiments, did not modify the general results.

Before commencing an experiment, care was always taken to ascertain that the entire apparatus preserved perfectly the vacuum, and the exactitude of the process was *proved by the repletion of the experiment* several times, on the same subject, as nearly as possible under the same circumstances.

The comparative results of these experiments are in an unusual degree interesting. They are stated by the authors by estimating in *grammes* the amount of carbonic acid exhaled in an hour by each subject, and are summed up in the following paragraphs:

"1. The quantity of carbonic acid exhaled by the lungs in a given time, varies according to the age, sex, and constitution of the subject.

"2. In males, as well as in females, this quantity was modified ac-

cording to the age, and this independent of the weight of the individual submitted to experiment.

"3. In all the periods of their lives, comprehended between eight years aud the most advanced age, males and females differ from each other in the quantity of carbonic acid which is exhaled from their lungs in a given time. All other things being equal, the male exhales a larger quantity than the female. This difference is particularly apparent between sixteen and forty years, the epoch during which the male generally evolves from the lungs almost twice as much carbonic acid as the female."

[In males from 16 to 40, the quantity of carbon oxidated in an hour, rises from 10.2 to 12 grammes; in the female, at the same epoch, it remains at about 6 or 7.]

"4. In the male, the quantity of carbonic acid exhaled constantly increases from eight to thirty years, and the increase becomes suddenly very great at the time of puberty. After thirty, this exhalation begins to decrease, and the diminution is more rapid as the subject approaches an extreme old age—to such a degree, that, at the last limits of life, the exhalation of carbonic acid may become the same as it was about the age of ten years."

[Thus, while the quantity of carbon discharged in an hour from the lungs of a boy of 8 years, is 5 grammes, at 10 years it is 6.8 grammes; at 15 years, 8.7 grammes; at 24 years, 11.6 grammes; from 30 to 40, it suffers a slight and gradual diminution; at 51 it is about 10.1 grammes; at 59 about 10; at 68 only 9.6; and at 102 years, as ascertained in one subject, it is only 5.9 grammes.]

"5. In the female, during the epoch from eight years to puberty, the exhalation of carbonic acid augments with the age, as in the male. But at the time of puberty, synchronous with the appearance of the menses, this exhalation, contrary to the fact in males, is suddenly arrested, and it remaius stationary, nearly what it was in childhood, as long as the menstrual discharge regularly recurs. At the time of the natural suppression ot the menses, the exhalation of carbonic acid by the lungs is suddenly augmented in a notable manner: it then decreases, as in males, in proportion as the female advances towards an extreme age."

[Thus, while the carbon discharged in an hour amounts to 6 or 7 grammes, in femnles from 10 to 15 years of age, it remains the same during the whole of that period of life in which the menstrual discharge recurs regularly. At the time of the suppression of the menses, at from 38 to 44

years of age, it rises to 8 or 9 grammes, and then goes on to decrease, as age increases, until at 82 years, it is again only 6 grammes.]

"6. During all the time of pregnancy, the exhalation rises to the quantity furnished by the female who has passed the epoch of the suppression of the menses."

[In four pregnant females, submitted to this experiment, the carbon oxidated in an hour was from 7.5 to 8.4 grammes.]

"7. In both sexes, the quantity of carbonic acid exhaled from the lungs, is proportionately larger as the constitution is stronger and the muscular system in a greater degree of development."

Thus, while a young man of 26, whose muscular system was extremely well developed, exhaled 14.1 grammes of carbon from his lungs in an hour, the mean of the observations made at this age gave only 11 grammes; and while a man of very weak muscular system, at the age of 45, only oxidated 8.6 grammes of carbon in an hour, another of 60, of extreme muscularity, discharged 13.6 grammes from his lungs in the same time, and one of 63 years, equally developed. gave 12.4 grammes. It would be a highly interesting subject of research to ascertain whether cerebral development or cerebral action is also accompanied by increased exhalation of carbonic acid from the lungs.

It will be seen that these investigations are only just commenced. But the able experimentors declare their intention to go on with their researches; and they will doubtless give, at some future time, a more extended view of the influence of the various physiological, pathological, or external circumstances which may affect this exhalation.

Similar researches have been commenced by M. Scharling, of Copenhagen; there is consequently every reason to hope that the science of physiology will speedily be enriched with a host of new facts, which will relieve many of its dark and speculative regions, and substitute positive truth for probable hypothesis.

*Lexington, Ky., July* 5, 1844. R. P.

# THE WESTERN LANCET.

CINCINNATI, JULY, 1844.

## YELLOW FEVER.

In the May number of the New Orleans Medical and Surgical Journal, we find several excellent papers on yellow fever, of which the profession in New Orleans have ample opportunities for observation. In the Charity Hospital reports, by J. B. Slade, M. D., several important pathological facts are pointed out, which merit particular notice. It is now the most commonly received opinion, especially since the investigations of Louis in 1828, at Gibralter, that the disease of the liver is the peculiar and characteristic morbid appearance found in this fever. It is true, these observations were drawn from a single epidemic, and, therefore, may not be altogether conclusive; but the ability of the observers, Louis and Trousseau, their extensive opportunities for post-mortem examinations, and the undoubted character of the disease, have given an importance and authority to their reports unequalled by any other investigations on this subject. These strong claims to our confidence, and their apparent conclusiveness, cannot, however, preclude future investigations, or the respectful consideration of reports invalidating the preceding conclusions.

In the report by Dr. Slade, of cases treated in the Charity Hospital, it is stated that, contrary to the commonly received opinion, the liver was usually *quite healthy.* In all the cases examined, the chief morbid action was found in the stomach and bowels, which exhibited evidences of inflammation and its consequences.

These are important considerations, and may have a bearing beyond the

disease immediately under notice. There can be but little doubt, that what is here termed *bilious* fever, depends no more upon absolute disease of the liver, functional or organic, than does that of yellow fever, as exemplified in the above reports from the Charity Hospital. It is a remarkable fact, and one that forcibly illustrates the indomitable nature of preconceived opinions, that post-mortem examinations of patients dead of fever, are often confined, almost exclusively, to inspection of the liver; and if any evidence of even vascular fulness can be detected in this protean organ, it at once affords a full and satisfactory explanation of the whole subject. But should it turn out, in the end, that *yellow fever*, a disease above all others that is supposed to depend upon hepatic disease, has not in reality that pathological relation as its essential element, surely it would greatly modify our conceptions of the bilious pathology of remittent fever.

The same Journal contains another very interesting article on yellow fever, written by Dr. J. F. Beaugnot. In the treatment of the fever, the author recommends a very bold, but certainly an entirely rational method of cure. The treatment referred to is, to bleed, at the commencement of the disease, until syncope is induced; this, of course, secures a *temporary* remission, and this partial abatement of the violence of the disease is embraced as an opportune moment to administer the great anti-periodic, *sulphate of quinine.* By these means the violence of the disease is at once mitigated, and the train of morbid actions ultimately entirely subdued, with greater certainty than has hitherto attended any other practice. This practice is not strictly original, although the author had not seen the suggestion until after he had resorted to it himself, and it was, perhaps, but little known in this country. True, quinine had been given in yellow fever, but not in the mode described by Dr. Beaugnot.

It is perhaps unnecessary to add, that the same principles, that is, the application of remedies for the purpose of securing an early remission, in our bilious remittants, as preparatory to the use of quinine, has been found eminently successful. For additional remarks on this subject, see Professor Mitchell's article entitled "*Hints for the correction of certain Practical Errors,*" Western Lancet, vol. II, p. 361.

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MANUAL OF EXAMINATIONS.—This is the title of a very neat volume of 615 pages, by J. L. Ludlow, M. D., and published by Messrs. Barrington & Haswell. It is, of course, designed to aid students in sys-

tematizing their studies, and more especially to prepare them for the final examination for a degree. It embraces all the branches of medical science, and is sufficiently full and comprehensive to revive the student's knowledge of subjects previously studied, and to furnish him, at a glance, with a good general view of the whole subject.

We have heard objections urged to works of this character upon the supposition that students might be induced to rely upon the answers committed to memory, without acquiring a just conception of the subjects, and thus deceive themselves and their instructors. The sensible student, however, should be able to appreciate the character of such works, which are not really intended to impart a thorough knowledge of all the topics introduced, but rather to keep before him what has previously been learned, and to teach him the course of a general examination. With this view, and these restrictions, works of this character will prove highly useful to students. We have no hesitation in saying, that Dr. Ludlow's Manual is decidedly the best, both in relation to comprehensiveness and general accuracy, that has yet been published in this country.

For sale by Messrs. Desilver & Burr, 112 Main street.

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Jefferson Medical College.—We have received the annual circular of this flourishing school, by which we learn that more than one hundred pupils were added to the class the last session, a gratifying evidence of its prosperity. Jefferson Medical College has gradually grown into favor, and may now be considered one of the most popular medical schools in our country.

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Dearborn County Medical Society.—We are gratified to learn that a Medical Society has been formed in Dearborn county, Indiana, and that its prospects of a successful issue are undoubted. The first meeting was held in Aurora, on the first Monday in June, at which time the society was organized. The society meets monthly, and its exercises consist of essays and discussions.

Medical men have it at their command to advance their own interests, both in scientific and social relations, and all the benefits arising there-

from, by concert of action, mutual interchange of opinions, and a better understanding of each other's character. We trust our brethren in Indiana will engage in this enterprise with a determination to place their society among the first of the country, and to emulate those of older date. Our esteemed friend and correspondent, George Sutton, M. D., is corresponding secretary.

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ANIMAL CHEMISTRY. — The subject of animal chemistry is exciting no little interest at the present time throughout the medical world. The late publication of the celebrated Liebig has aroused a spirit of inquiry that will not again slumber until important discoveries are made, or recent propositions confirmed or refuted. Liebig's views are in part experimental and in part conjectural, and in estimating their value we should carefully bear in mind these distinctions.

One of the most bold and energetic opponents of Liebig's doctrines is found in the person of Prof. Caldwell, who has severely criticised the views of this great chemist. This author is one of the most able critics in the United States, and as he feels a peculiar hatred to the chemico-physiological doctrines which are now likely to receive public favor, it is not surprising that he should put forth his full strength in opposition to what he regards as the innovation of the chemists. Prof. Yandell replied at length to the criticism of his colleague, and Prof. Caldwell, considering himself aggrieved by the manner and matter of the reply, ha publighed a rejoinder, in which he intimates that a more lengthy paper will shortly appear, in which the entire subject will be more fully exposed.

We confess that we feel a lively interest in these discussions, and we doubt not that the profession generally, as well as the writers themselves, will be materially benefitted by the light that will be elicited, provided the combatants restrain themselves within due bounds, and prevent the controversy from degenerating into personal bickerings, of which there is some indications. Scientific points can surely be discussed, especially by colleagues, without engendering personal differences, or the use of offensive epithets, which will necessarily prove a diversion from the points at issue, and prevent the parties from exercising their accustomed judgment.

TRANSYLVANIA MEDICAL SCHOOL AND THE WESTERN JOURNAL OF MEDICINE AND SURGERY.—In the May number of the Western Journal of Medicine and Surgery, is a communication, headed "*Transylvania Medical School*," and signed "Y.," which, while it bears the semblance of candor and moderation, is replete with misrepresentation and ill feeling. It is believed that the author is Professor Yandell, of the Louisville Medical Institute, and that he also wrote, or prompted, several illiberal, sneering, and highly unjust articles against the Transylvania Medical School and its supporters, which have appeared in the Louisville Journal.

The body of the communication in question is principally made up of extracts from the newspaper publications of a writer who signed himself "A Friend to Lexington,"—a graduate of Transylvania, who, having taken offence at Dr. Dudley and some other of the Lexington Professors, thought proper, under the pretence of a desire to promote the welfare of the Transylvania School, to attack that institution in a most unwarrantable manner, and to publish erroneous assertions in regard to her standing and that of some of her professors, injurious to her and to them.

Some of these assertions are in substance as follows:—That the Transylvania School, which had so nobly sustained herself under all the difficulties she had encountered, and the unceasing war which had been waged upon her since the year 1837, has "commenced with fearful rapidity a decline in public estimation, and even in the estimation of its friends," and that this supposed decline is in consequence of the circumstance that Dr. Dudley, being Professor of Anatomy and Surgery combined, did not and cannot give the same amount of instruction on these two branches, during the session of four months, as was given in the Louisville Institute.

In the communication to which we refer, as well as in several reprehensible articles in the Louisville Journal, Dr. Y. endorses all that has been said against the Transylvania school of medicine, adding new injuries—when it is believed he must have known he was promulgating slanders, the effect of which, if believed, would be to prostrate a rival institution of learning of that in which he is a professor.

That Transylvania is in the decline, is easily disproved by a reference to her catalogues—the number of her students and graduates for the last session being actually greater than those of the preceding one—the class in the session of 1842–3 being 204, of whom 57 graduated, while that of 1843–4 numbered 214, of whom 59 were admitted to the honors

of the doctorate. The elevated standing of the Lexington School, in the minds of the members of the profession, is shown in the large proportion of her graduating classes,* as well as in the high character sustained by her graduates as surgeons and practitioners.

The mis-statement that more time is devoted to anatomy and surgery in the Louisville Institute than in the Transylvania School has been already exposed in the same newspaper in which it was first made. Dr. Y. knew it well, yet he thought it proper to republish the injurious errors and to suppress entirely the correction and the truth. We will give the facts in the case, that the members of the profession may judge whether Dr. Y. has acted in this matter in a manner to promote that "peace," which he asserts, is "the only line of dignity," or whether his opprobrious publications, making rejoinder necessary in self-defence and in the cause of truth, are not calculated "to lead to a renewal of personal quarrels, of which the public is tired, and by which neither party is likely to gainany thing."

These are the facts: In the Louisville Institute, as we are credibly informed, the Professors of Anatomy and Surgery do not, together, lecture more than ten times a week on those subjects: they are assisted by a Demonstrator of Anatomy, and we doubt not they teach ably and successfully. In the Transylvania School, Dr. Dudley has always lectured nine times a week, and his adjunct Professor, Dr. Bush, lectured three times, making in all twelve public lectures of an hour each per week, on Anatomy and Surgery throughout the session. In addition to this, the adjunct Professor lectured three times a week to the dissecting class, and gave his daily attention to the dissecting rooms as Demonstrator of Anatomy. Instead, therefore, of there being less time devoted to these two subjects in Transylvania than in the rival School, there is actually a greater amount employed upon them, which, with the acknowledged ability and experience of Dr. Dudley, combined with his great powers

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| * 1839–40, | class | in | Lexington | 257— | regular | graduates | 60. |
| 1140–41, | " | " | " | 254— | " | " | 62. |
| 1841–42, | " | " | " | 271— | " | " | 55. |
| 1842–43, | " | " | " | 204— | " | " | 57. |
| 1843–44, | " | " | " | 214— | " | " | 59. |

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| 1839–40, | class | in | Louisville | 204— | regular | graduates, | 39. |
| 1840–41, | " | " | " | 205— | " | " | — |
| 1841–42, | " | " | " | 262— | " | " | 53. |
| 1842–43, | " | " | " | 187— | " | " | 37. |
| 1843–44, | " | " | " | 242— | " | " | 47. |

The honorary graduates are not included in these numbers.

of simplifying and communicating knowledge, aided by his very able adjunct Professor, certainly rendered the courses of instruction on anatomy and surgery in the Lexington School at least as thorough and extensive as in any institution in the country. Indeed, the very able manner in which these two important branches of medicine have been taught by Dr. Dudley and his adjunct, has contributed in no small degree to the great prosperity of the institution.

All this is well known to Dr. Y., and he would not, himself, assert to the contrary. Yet he has, to the extent of his ability, been aiding the anonymous writer of Lexington in spreading abroad injurious misstatements, for the purpose of deterring pupils from attending the Lexington School, and inducing them to patronize the Louisville Institute. We leave it to his colleagues and the members of the profession at large to judge, whether this course is in accordance with the dignity of a Professor, with professional courtesy, or with the desire which he professes, to "see harmony existing among our numerous schools of medicine."

We had hoped that, in accordance with the wish expressed in the Louisville Journal some years ago, the competition between the two Kentucky Schools of Medicine would thereafter be one of honorable emulation. Such was the wish and the determination in Lexington, as can be shown by the invariable conduct of the Professors. When, in May, 1840, twenty-one highly respectable physicians of Louisville held a meeting, and published a series of very severe resolutions against the Professors of the Louisville Institute, charging them, among other things, with adopting a "standard of qualifications for admission to degrees, lower than that of any other School in the United States," and indirectly accusing them of *matriculating persons who could not read*, and of turning out upon the public hundreds of quacks, instead of educated physicians, the Lexington Professors did not think it right nor honorable to join in the controversy. Several other occasions of a like nature have passed, and they have alike carefully avoided entering the arena. On the contrary, nothing has happened in Lexington that could in any manner be perverted so as to operate against her School or her Professors, which has not been eagerly seized on in Louisville, and exhibited in a false light to produce an injurious effect on Transylvania.

Dr. Y. did not, doubtless, reconcile with his conscience and his dignity, the course of conduct which we now reprobate. He gives the following apology for his invidious remarks and his republication of the misstatements of the "Friend to Lexington," viz: "We should not have felt

authorized to refer to this controversy at all, if Dr. Peter, quitting the defence of Dr. Dudley, had not taken occasion to allude, in very offensive terms, to some of the professors of the Medical Institute of Louisville."

That the force of this apology may be understood, we will give "the offensive remarks" of Dr. Peter in full; as they appeared in the Lexington Inquirer.

"There is a game, into which we would not enter, and to which it is exceedingly unpleasant even to advert, which has tended to enlarge the classes at Louisville, at the expense of those at Lexington, as well as at the sacrifice of the *dignity*, at least, of those who engage in it. It is this: when the pupils are assembling, *some* of the professors of Louisville, or their agents, watch the arrival of the steamboats and stages, and, in company with various other agents who crowd around the newly arrived passenger, *beset* the young men who are coming to our medical school, and offer them all the *plausible inducements* in their power to cause them to remain in Louisville. We have been informed by young men, who have resisted these insidious importunities, that these gentlemen take occasion to animadvert, not only on our means of instruction here, but even on the character of the professors. This would not have been stated, but in consequence of the reiterated proofs which have reached us of its truth. We hoped for an *honorable competition* with our rival, and we do not fear it; but should we be twice outnumbered by means of arts like these,—should Transylvania be, indeed, undermined and destroyed by her enemies in such attacks, let her fall, rather than she should be sustained by any other than a *manly* and *honorable* support."

The charge made in the foregoing paragraph is a grave one, but it is sustained by the testimony of many highly respectable and intelligent young gentlemen, who have for several years past come through the city of Louisville to the Lexington school. It is not made against *all* the Louisville professors—most of whom, it is believed, never did, nor never would stoop to such *cheap shop* trickery. It is made more particularly against Poofessor Y., *and he has not denied its truth, and he cannot.* The necessity for its promulgation caused great pain to the writer; but it was his duty to do it; and since the ascription of such a course of conduct to a learned professor gives so much offence to Dr. Y. as to be a sufficient apology to himself for his late aggressions, it is hoped that he will no longer indulge in practices which his conscience disavows, which, when exposed to the public eye appear so scandalous, and which will not, cer-

tainly, tend to promote harmony "among our numerous schools of medicine."

It is the wish of the writer, as well as of all the Lexington professors, that this uncourteous strife should cease. They have always deplored it, but they have been driven, by the attacks of their rivals, to take up arms in self-defence. Even now the offensive war is continued; and while Dr. Y. is talking of *dignity* and *peace*, the professors in Transylvania are, doubtless by his pen or by his influence, sneered at and abused in the Louisville Journal, as a political partizan would scandalize a prominent opponent. Even those who have been lately appointed in the Lexington school, who have never taken any part in "the embittered strife between the rival schools," and whose high standing as physicians and as gentlemen, entitle them at least to that courtesy which always exists among gentlemen, and which should be in use among doctors,—have not been held sacred from the contumelious aspersions of the Louisville press.

This is not right. Dr. Y. will not say it is; but all this he has done, and for all this he is responsible. And yet, in the communication in the Western Medical and Surgical Journal, he calls on all "right thinking men" to "condemn an aggression by a professor in one school upon the members of a rival institution! Verily they will do it. P.

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If any of our young medical friends have a desire to extend their observations beyond our own country, they should avail themselves of the opportunity afforded by the Foreign Missionary Society. They must not, however, forget the necessary qualifications in relation to a religious character.

*Missionary Physicians wanted.*—A better opportunity was, perhaps, never presented than the present, for three or four young medical gentlemen, suitably qualified, to visit remote but interesting sections of the globe. By entering into the service of the Foreign Missionary Society, a passage would be secured in a good vessel, well fitted for a distant voyage, and the individual would be put upon a salary equal to his entire annual expenses; proportioned, of course, to the necessary cost of living in the country where the Board might locate him. At some of the stations where a missionary physician would be placed, an additional income, it is not improbable, would be derived from incidental practice. But religious character is an absolute prerequisite for being a candidate, with such testimonials as would fully show the professional qualifications of the person applying.

A brilliant reputation has been achieved by several missionary physicians, whose surgical operations abroad, for originality, boldness, and success, are unsurpassed in the annals of their own country. Their influence has been great with the nations and tribes of Asia and Africa, the Islands of the South Sea, and the western coast of America. While the savage, impelled by the hot spirit of revenge for a real or fancied injury, pounces upon the object of his hatred with the ferocity of an infuriated tiger, he never dares to molest the *medicine man*, in whose hands, according to his theory, are the shafts of death and the pabulum of life.—*Boston Med. and Surg. Jour.*

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The following article is quite as well adapted to the meridian of Cincinnati as that of Boston. Quackery is making fearful progress in every part of the country; and. so long as it receives the patronage and direct support of the Government, it will continue to extend its destructive influence. We may perhaps advert to this subject again, and furnish some account of the nature and extent of quackery in this city.

Progress of Imposition.—A shop is opened in Boston for the especial purpose of an anti-consumptive medicine. It is represented to be the discovery of a Dr. Halstead, of the State of New-York. To give it an air of importance, the handbill declares he "has discovered a remedy for curing consumption in its first, second and third stages. Its fourth is incurable," and therefore the benevolent sage has no preparation for that unlucky segment of the malady.

In walking through the principal streets of Boston, the afflicted are met at every corner by the most seductive advertisements of remedies for every human infirmity. There is such an abundance of testimony, too, of marvellous cures, when the forlorn patient was bereft of all hope under regular, that is, scientific treatment by honest, experienced physicians, that certain classes of men and women are persuaded against their own judgment, to dip deeply into the irresponsible nostrums of quack medicine dealers. Unrestrained by law, and the field being both open and profitable to all who have the hardihood to embark in the trade of selling specifics, conscience being smothered in an envelope of profits, these adventurers are constantly on the increase.

References are ordinarily made to gentlemen in official stations and clergymen, who not unfrequently lend their names to oblige a friend, and thus the unreflecting consumers of patent medicines feed upon such mixtures as the balm of life. We have no expectation of relief, since the spirit of the age is decidedly in favor of this system of sponging. People love to take drugs. Some prefer it in quart bottles, and others in the form of homœopathic pellicles, five thousand to the grain. Medicine they will have, and they seem to think him the best practitionor who disposes of the greatest number of doses in a given time, whether good or bad, great or small.—*Bos. Med. & Surg. Jour.*

THE

# WESTERN LANCET.

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## PATHOLOGY AND PRACTICAL MEDICINE.

ART. 1.—*Report of the Diseases which appeared in the Cincinnati Orphan Asylum, during the years* 1842–3. By THOMAS CARROLL, M. D.

[CONCLUDED FROM PAGE 216.]

DIARRHŒA often becomes chronic with varied colored discharges, from light or clay-colored to green, orange brown, or black; and sometimes was mixed with the ingesta. This latter occurrence frequently took place in these cases within 24 hours after the visits of friends who frequently give without the knowledge of the nurse various indigestible articles to these little sufferers, *it would seem for no other purpose than the mere pleasure of making them sicker than they were*; indeed we have on more than one occasion ascribed the loss of patients to this cause. During this condition of the disease the abdomens of the patients were sometimes prominent and tense to the touch; again, they were lank and soft. The tongue was coated to a lesser or greater extent, and that languor and paleness, that was brought about, by the first onset of the disease attended often through many weeks.

From the outset the warm bath was premised once or oftener each day, sometimes common salt was added when the patient was weak, flannel was directed next the skin, with a roller, occasionally round the abdomen. These directions were continued through the chronic stages.

When the disease had fairly assumed a chronic aspect the treat-

ment necessarily had to undergo considerable change. I found it improper to continue the use of mercury to the extent that the first two or three weeks justified; the dose of calomel was therefore brought down to the eighth of a grain, two or three times a day, and sometimes, indeed frequently, laid aside altogether. On a few occasions the hydrarg. cum creta was directed or the blue pill, but experience has long determined me much in favor of calomel, as I think the action on the mucous surface is more favorably influenced by it than by any of the other preparations. But when mercury has to be laid aside in consequence of the amount, or effect produced, much difficulty has to be encountered in the after management of the case; under these circumstances I first added to my usual powders one grain of rhubarb, indeed, at first I directed but half a grain. I was pleased with the effect that this medicine had, or that I thought it had. The certainty of inflammation of some portion of the mucous surface in chronic diarrhœas seems to justify the adoption of such a course. About three grains a day of rhubarb will frequently seem to give the evacuations a better consistence and color. To enable me to manage these cases with more success, I conceived that emetics might be useful; I began by giving five grains of ipecacuanha, and repeating if it did not operate every twenty or thirty minutes. I but seldom, however, gave more than two doses in this way; and if they did not operate, I then depended on their downward action. To my astonishment, however, I found that frequently neither vomiting, nor purging followed, but sudden cessation of the diarrhœa. After twelve or twenty-four hours an evacuation of better colored fæces took place. On one occasion I directed five grains every half hour until vomiting should take place. The nurse having but three doses of ipecacuanha, gave them, but found that no vomiting followed; she then gave a tea-spoonful of antimonial wine every twenty or thirty minutes until the child had takent three; she then ceased, but neither vomiting nor purging followed. The diarrhœa was much benefitted, and this child has repeatedly taken ten grains of ipecacuanha since, with but little disturbance of the stomach, and always

with benefit. Children after taking ipecacuanha in the manner directed will often sleep for some hours, or be in a condition approaching it. This may be produced by the feeling of debility or slight sickness.

The first patient on whom I tried this prescription had labored for months under chronic diarrhœa, and early in '43 it became very feeble. Small doses of calomel, etc., had been given, yet the disease held on its way with unabated virulence. The sugar of lead with absorbents were tried, but with little effect. The gums became swollen and tender, either from the effect of mercury, or a tendency to ulceration from debility. Under these circumstances I determined on a change of my course: 5 grains of ipecacuanha were directed at a dose; one portion vomited the patient, and the alvine evacuations on the following day had altered, from being thin, offensive, and light colored, to a more consistent composition, and a darker color. Little more was done for this child than to occasionally repeat the emetics, and it sometimes took four-grain doses of sulph. quinine with apparent advantage. In January '44, this child was in good health; and now when I am writing (July '44) the health remains unimpaired.

It has been noticed that malaria and effects of the season are frequently the direct and leading causes of the bowel affections of children. In this locality it is not very unfrequent to find cases of diarrhœa complicated with remitting fever, that is, the morning remissions are greater in some cases than in others; and even sometimes wear the livery of intermitting fever. This is much more the case than in more elevated locations. The fever in these cases, at the Asylum, is much off in the morning, but rises by the middle of the day, and continues to increase or at least is unabated until the turn of the night. But few physicians who have lived in a malarious situation have not seen well marked cases of ague at very early periods of life. We know that in some parts of the world children frequently take intermitting fever at an early age or during the first year, and continue to have it annually through life or nearly so. I knew two gentlemen, more than twenty years

ago, who were born in North Carolina, and in Pascotank Co.; one of them lived thirty years in that County, and during every season he had the ague. He then removed to a high location, and had not had it for 40 years. The other gentleman, had resided in the neighborhood of where he was born during 40 years, and every year successively had the ague; he then removed to a more healthy location, and had not had it for 20 years—no chills having appeared after his removal.

The infantile remitting fever, as described by authors, appears to depend upon a different cause or causes, it being attended by inflammation of some of the abdominal viscera, and may, or may not be attended with diarrhœa. In the Asylum this affection has in all cases of it, which have been few, been attended by chronic diarrhœa in some form, and which in every instance preceded the other symptoms.

Of that kind of intermitting or remitting fever dependent on malarious origin I presume the following case to be an example, though it may indeed be doubted :—

M. B., an infant of one or two weeks old, was found at the door of the Asylum. Was feeble and emaciated, and it was discovered that it had regular chills every morning, which were followed by fever. Diarrhœa soon supervened, probably from feeding, and the stomach was irritable with clay-colored alvine evacuations. The skin was dry and corrugated or wrinkled, and was covered with downy hair, a phenomenon often attendant on marasmus. This patient was treated by administering half a grain of calomel with still less doses of Dover's powder every or every other night: no improvement however took place, and it succumbed in about three weeks after admission. On post mortem examination, I was unable to find any lesion of the alimentary tube, unless an apparent thinness of the intestinal coats. The liver, however, had its concave surface deepened in color, and more firm in texture than the remainder, and the gall-bladder was engorged, and thickened. Would not a different course have saved this child? possibly a grain of calomel a day with quinine would have been a good prescription, and might have saved it.

The following cases may be considered samples, particularly belonging to the class of infantile remittents.

On the 18th of December '42 an infant was admitted, aged 18 months. At the time of admission it was worn down with diarrhœa, had swelled feet and hands. The skin of the extremities was of a dark red and below the common standard of temperature. It almost constantly cried during the day, and through a large portion of the night. The color of the evacuations was varied, and thin, and offensive. The following course was laid down and steadily pursued. Half a grain of Dover's powder and a fourth of a grain of calomel were given every 8 hours, with the eighth of a grain of quinine in solution. A tea-spoonful of wine was allowed two or three times a day. It was taken out on the 27th of January '43 cured. Since which time it has been again brought in, but in good health.

The case which I am about to relate is one of interest, and did not take place either in '42 or '43, but since. It was a pure case of infantile remittent with obstinate diarrhœa. It came into the house on the 15th of May, '44. It had diarrhœa when powders of calomel and chalk with Dover's powders were directed, with, occasionally, sugar of lead; and with suitable external applications. Under this treatment, however, it did not improve. About the 27th I left for the East, and my friend Dr. Dodge took charge of the establishment during my absence. He made various prescriptions, and as the debility continued to increase, he directed, before my return, a tea-spoonful of tincture of cloves, two or three times a day. The nurse thought this had a good effect; it was continued after my return, which took place on the 13th of June, down to the time of dissolution which took place on the 6th of July. At death the patient was much emaciated; had a completely marasmatic appearance, and seemed to suffer much pain. The dejections were generally of a very light color, frequent, and without consistence. There was no tumefaction of the abdomen nor apparent tenderness. The skin had been mostly dry with occasional sweating about the head. I found, on dissection, the coats of the stomach much thickened, particularly towards its pyloric orifice, and its capacity of distension

greatly diminished, as two or three gills would have completely filled it. Its mucous surface was more dense than usual, and vascular, but not very red. After passing the duodenum, the marks of inflammation on the mucous surface was not very great until I arrived within about two feet of the termination of the colon. At this point the bowels suddenly contracted to a much smaller space than usual, apparently capable of not more than distention to an inch in diameter. Throughout this space there was contained a milky looking fluid, which seemed to be partly pus, and partly mucus, and was, I presume, what some authors have denominated chylus; but was no doubt the production of the mucous surface, that had been and was in an inflamed condition: considerable amounts of this fluid had been voided for some time. The spleen was enlarged and firm in texture; the kidneys, also, were in this state, but seemed more enlarged and firm than the other organ. The gall-bladder was engorged and the liver enlarged, and probably darker in color than natural; but what was most singular, was the condition of the mesentery and its vessels. It was thickened throughout its surface, and its vessels much increased in size; this did not seem to be merely congestion, but a morbid enlargement from long continued chronic inflammation. The mesenteric glands were somewhat larger than natural though they did not seem to be diseased in the same degree in the other tissues. Now I must admit, that in the treatment of this patient, an error was made in administering stimulants, though at the time I could see no good reason against the adoption of the course. It would seem to my understanding that an occasional purgative would have been useful, composed of calomel and some other substance; and it argues the propriety of giving those medicines calculated to disgorge or stimulate to healthy action the mucous surfaces, as well as to excite the portal circulation. Probably anterior to the time of admission into the Asylum, or possibly even after, a course directed more especially to the use of emetics and mercurial cathartics, would have saved the patient.

It is idle to say, that patients cannot bear cathartics, who have

diarrhœa, because we know they will frequently cure the disease, and that suddenly. All physicians of experience know very well that marasmus is often cured by purgatives, almost alone, or rather laxatives, continued for weeks, in minute doses with blue pill or calomel. Now, diarrhœa attending the same disease does in my opinion lessen the propriety or need of these remedial means; but does not entirely interdict their use, indeed from the evidences given by the dissections in this case I cannot avoid thinking, that they would be of much service.

That peculiar disease known as ulcerated or inflamed gums, and occasionally terminating in gangrene of the mouth, etc., which pervades so many asylums dedicated for the benefits of orphanage has not let the Cincinnati Asylum escape; as I understand, it very soon made its appearance after the establishment of the Institution. Those cases which have fallen under my observation have, in nearly every instance been preceeded by diarrhœa, and accompanied by it. This form of the disease has been more difficult of management than the opposite or where the bowels have been constipated.

Cancrum oris has but of late years attracted the general attention of the profession in this country or probably any other. At first it was invariably thought to follow the exhibition of mercury. Observation and experience have, however, corrected this opinion: it is now, indeed, well known, that the disease frequently terminates in mortification of the mouth, in cases in which no mercury had been exhibited. As knowledge advances upon the subject, it seems to be understood that this disease mostly appears on alluvia or on marshy or malarious localities; so far as my observation has extended, it would appear that it but seldom is found out of those situations, and that where it does, it mostly follows the use of mercury or possibly some of the eruptive diseases. In this city, cases have occurred under various circumstances. In some cases mercury had been given and sometimes not. In the Asylum, I am informed anterior to my appointment, that a number of cases of cancrum oris occurred, and that this occurrence, in several instances, took place where no mercury had been given. I will here report

a few cases which I think will conclusively prove that mercury is not the alone exciting cause, and will, I hope, help to demonstrate the true nature of this disease.

C. A., a female child aged 10 years, was taken on the — of March 1842 with inflammation of the mucous surface of the mouth, and with swelling of the sub-maxillary gland of the left side, which increased until the 24th when an abscess of it burst into the mouth, and discharged considerable bloody pus of a fetid character. The tongue, with the opposite sub-maxillary gland, lips, and face, all participated in the swelling. The pulse was quick, and there was general fever. On the evening of the 28th, 5 grs. of calomel were directed, and on the 29th, 5 more with 10 of jalap. The jalap was repeated on the 30th, and in the evening of the same day an ounce of epsom salts was directed in broken doses through the night, and on the morning of the 31st the patient was purged freely and frequently, being the first for several days. From the beginning, profuse discharges of saliva accompanied the disease and increased up to the 31st. The tongue was slightly ulcerated, and the lips and face continued to swell, up to the 1st of April. There was now less fever, though the patient was unable to speak. From the 1st to the 3rd the symptoms had changed but little. Antimonial wine was directed in ten-drop doses every 4 hours. On the 4th the tongue was less swollen, but still swelling of the cheeks, with that peculiar solidity of them so common to this affection continued, but in an ameliorated condition. The bowels were kept open with salts, and a gargle was used composed of 3 grs. of nitrate of silver and one ounce of distilled water; this was dropped into the mouth every few hours. The antimonial wine was increased to 20 drops every 4 hours. By the 9th the patient sat up, eat, and talked, and continued to improve from that time to the 30th, when she was pronounced convalescent.— During the worst periods of this case I much feared the termination in mortification. Some of my medical friends thought that it would result, but complete recovery took place without any external sloughing, and only in very small points on the inner lining of the cheeks. As the inflammation of the glands, and so forth, took place before any

mercury was administered, it is obvious that this medicine did not produce it, and it is even possible that the calomel acting on the mucous surface of the alimentary tube prevented a termination about the face that would have proved fatal; although I would not again under the same circumstances give so much calomel. Frequent cases of inflammation of the gums have appeared since I attended the establishment, which have mostly terminated in ulceration to a lesser or greater extent. There has first appeared redness of the gums of one side, which has been confined to the lower or upper jaw, not often if ever appearing in both at the same time. It has most generally appeared on the gums of the molar teeth of the lower jaw. The redness has in most cases approached a purple. After some time the gums have ulcerated round the teeth, and if allowed to continue, the teeth themselves have decayed, which indeed has been a very common circumstance. The tongue has generally ulcerated in patches around its edges or about the point. A speck of greater or less extent on the mucous surface of that part of the cheek approximating the ulcerated or inflamed gums, and of an ash color, has appeared. This has generally been an inch or more long, though occasionally not so much. Its width has been about one-third the length. By feeling this spot I have found less or more induration of the cheek. This hardened condition has extended altogether through the cheek in very few cases. The lips have sometimes become involved in this induration, or has been altogether confined to them.

The mode of treatment pursued was to use local and general remedies. The general remedies were directed to the condition of the general health. Debility was prevented, if possible, and the condition of the alimentary canal was managed according to circumstances; in most of the cases diarrhœa, in a chronic form was present. This affection was combatted in the usual way, with the exception, that mercury was given in smaller doses or altogether omitted. As debility, and a remitting form of fever was in many cases an attendant, quinine was given in nearly all of them. I tried arsenic in two cases of this kind, with advantage. One drop of Fowler's solution was directed morning, noon, and night, for about

two weeks; I am not certain, but that it is among the very best remedies. In one case I used iodine in middling free doses, and although it seemed to have but little influence on the ulceration, the health of the patient much improved under its use; so did the health of those who took the arsenic. Still, I presume that quinine will, in the general, answer a better purpose. Half a grain may be given to a child of two years of age every 8 hours. Cold bathing should be advised in all cases of a chronic character. This course was followed in some of the cases.

The local treatment was almost exclusively the nitrate of silver, either in its solid state or in solution. When the solution was used, its strength was ten grains to the ounce of distilled water. During 1843, I, however, in most cases, used a pencil of the nitrate about once in three days. It was applied to all the ulcerated parts; and when there were deep sloughs, I ran it round them, and by this means gave activity to the parts immediately connected with those that were dead. When the disease consisted of a mere ulceration of the gums or inflammation of them, all that I found necessary was a solution of the nitrate applied once or twice a day; in cases where the mortified parts are considerable, and much fetor, frequent applications of a weak solution was beneficial, and in deep and active ulcers a daily application of the nitrate in a solid form was found advantageous.

During '42 and '43 there were 20 cases of various grades of this affection, two of which proved fatal. Both of these had been treated for several weeks for diarrhœa, and took repeated small doses of calomel with Dover's powder, etc., for the arrest of the diarrhœa; but when ulceration or ash colored spots appeared, the mercury was laid aside, and the patients treated upon the principles above laid down: The quinine was depended on instead of mineral "tonics." Although the faces of these children swelled considerably, and there were deep sloughs in the insides of the cheeks, no gangrene supervened, which involved the skin: the patients indeed died from a diseased condition of the alimentary canal. Had it not been for this, their recovery would have been certain, or nearly so. These patients had taken during 35 days, half a grain of calomel each day, at the

end of which time their mouths inflamed: one was three years of age, the other, two. Another child was taken in the same way at the same time: this recovered, and was much benefitted by being sent to the country, two or three weeks after it became affected.

The following case will show the way by which this disease sometimes makes its first appearance: in it no mercury had been given. On the 1st of June, '43, a child one year old was taken with ulcerated gums, and a few yellowish pimples on the tongue and lining of the mouth. A pustular eruption soon appeared on the lips and chin. The lips and lower part of the face now swelled very much. Saliva was largely thrown out; the patient lost its appetite; its bowels were deranged and it became feeble, and emaciated rapidly. This case was treated by emetics and tonics with absorbents; and some wine was allowed. It took within 10 or 12 days 3 emetics of ipecac., and also, for a considerable time, the fourth of a grain of quinine every 6 or 8 hours. The local treatment consisted of nitrate of silver in solution to the mouth internally, with washes of borax, etc. On the 1st of July, 1843, the patient was nearly well, and recovered perfectly.

I shall relate the following case to show that the disease simulates the mercurial diseases of children, and to show that men of acknowledged skill may be mistaken:—

A child was admitted into the Asylum about the middle of June, '43; had diarrhœa when admitted; this, however, had subsided by the middle of July at which time it was taken out of the House. Two or three weeks after, the mother called at my office, and said, the child was ill with diarrhœa. It was pale and emaciated. I prescribed powders composed of half a grain of calomel, half a grain Dover's powder, and four of prepared chalk, with tonics. One of the powders was given every night for a week, then they were laid aside. A week afterwards, the child was brought to me: I found the gums ulcerated and the right half of the upper lip swelled, indurated, and of a dark reddish color. The induration indicated a disposition in the parts to slough. As there had been but three grains and a half of calomel given to this patient, I concluded that

mercury had nothing to do with the production of the ulceration or induration of the lip.

On the day that I saw the patient last it was taken to the Hospital, and as I have understood, it was determined that the condition of the mouth had been brought about by the action of mercury. If, however, mercury in the quantities given in this case can do so much injury, it is time to consider whether it ought to be given in any case. The history of cancrum oris, however, proves beyond the shadow of a doubt, that it supervenes not only in asylums, where it is much more prevalent than any where else, but in numerous other situations and where no mercury had been given. But as this disease occasionally becomes endemic, it behooves practitioners to be on their guard as to the use of mercury, as I, with others, believe that under these circumstances, it cannot be given with safety, at least in large doses. The reader has observed above, that I have prescribed the iodine and the arsenic with apparent advantage. I think it worthy the serious consideration of the practitioner, whether under certain chronic forms of this malady it would not be proper to give the iodine a fair trial, or even the Fowler's solution. In cases out of the Asylum unattended by diarrhœa I have found benefit from combinations of rhubarb, soda, and very small portions of calomel every night.

With regard to the cases of inflammation of the brain with or without effusion, I shall now say nothing as to their treatment, but hope to on a future occasion; neither shall I do more with regard to its history than state that but three cases of this kind occurred in which I had any positive evidence of the presence of the disease, though I presume there was effusion in one or two cases where no examination had been made.

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Art. 2.—*Removal of a Diseased Ovarium.* By J. D. Bowles, M. D., of Harrison, O.

Mrs. Brant, æt. 25, in the middle of August, 1843, for the first time, noticed a small tumor in the left hypogastric region, which has unceasingly continued to increase; it now occupies the whole lower part of the abdomen, and extends upwards to midway between

the umbilicus and ensiform cartilage; it is very moveable in a lateral and somewhat in a vertical direction; its surface feels hard and uneven as if lobulated.

Upon examination the vagina and os uteri feel healthy; the direction of the vagina inclines to the left; pressure to the right of the neck of the uterus gives slight pain; here, through the vagina, the tumor can be felt. She complains of pains in the lumbar region, and down the thighs, at times resembling those of parturition. The urine is frequently and rather painfully voided. The bowels are inclined to be costive; in other respects, the various functions of the body are performed in a healthy manner.

Her habit is spare, and has been so from the commencement of child bearing; she has borne four children. Some physicians supposed it to be a case of extra-uterine gestation; but Dr. Crookshank, who had seen her previously, differed, and declared it to be an enlarged ovarium; he informed the patient that nothing but the extraction of it would relieve her; in these views Dr. Fuller and myself coincided. She readily assented to the proposition, having an impression on her mind, that if it could not be removed, it would kill her.

She cannot ascribe it to any particular cause, unless it arose from an accident, which occurred to her about six weeks previously to her last labour, by which her leg became entangled in a rope, to which a yoke of oxen were attached, and she was dragged forty-feet or thereabouts. We advised her to come to our neighborhood to be operated upon. She assented, and came to Dr. Crookshank's in Harrison.

*August 5th.*—Yesterday a cathartic (castor oil) was given to the patient. This morning, in the presence and with the assistance of Drs. Fuller, Crookshank, and Francis, I proceeded to operate upon the plan pursued by McDowell, Lizars, and Clay.

The patient having her bladder and rectum evacuated, was laid on a table; her head resting on a pillow; her legs hanging over the end, and her feet resting on a chair.

*Operation.*—Avoiding the umbilicus, an incision nine inches in length, was made through the linea alba, from the upper part of the

tumor to the symphysis pubis. Upon drawing aside the parites, the tumor might be seen through the greater omentum, which passed down in front of it: upon endeavoring to raise it, it was found adherent to the tumor. The adhesions were readily separated by the handle of the scalpel or fingers. There were no adhesions on the posterior part. In endeavoring to raise it from the right iliac fossa, its attachment to the broad ligament of the uterus, which formed the pedicle, was brought into view; the pedicle was about two inches wide, its broad surface closely adhered to the tumor, its blood vessels were large, and distended; following its course for a short distance, the finger could be passed around it; here a ligature of double silk was applied, and firmly tied, and passed through the pedicle between the tumor and place of application; the broad ligament was then cut through. Endeavoring to raise it from the right iliac fossa, was found firmly bound down by adhesions to the uterus and bladder; the close adhesion of the tumor to the former gave to the hand, when examining it from behind, a sensation as if their structures were intimately blended into one consolidated mass, but as soon as the pedicle was divided, upon raising the tumor in front, the adhesions between it and the fundus of the bladder, and uterus, were easily separated by the handle of the scalpel, and the tumor removed. We inclined her on one side, that the accumulated blood might escape, of which not more than six or eight ounces were lost, and not a jet of arterial blood was seen.

Upon being replaced in her former position, vomiting occurred which forcibly protruded the intestines from the wound, and rendered it somewhat difficult to replace them, but Dr. Fuller by well directed pressure resisted the propulsive action, and stimuli being administered the vomiting subsided. The wound was then closed by an interrupted suture of five stiches. At distances of an inch and a half, long strips of adhesive plaster, reaching across the abdomen were applied between the sutures; a long compress on each side of the wound; raw cotton over it; and a broad bandage surrounding the body, enveloped the whole.

Since the operation she has gone on well, and has had nothing to

complain of, excepting that on the remainder of the 5th and until the evening of the following day, her stomach would retain nothing; it yielded to an effervescent or gruel. From that period she cannot be said to have had an untoward symptom. Her diet was the mildest that could be suggested; a dose or two of morphine has been the only medicine administered.

To keep her abdominal muscles at rest, her urine was constantly drawn off by the catheter, and her bowels washed out by enemas, to prevent distension from flatulence a tube was kept in the rectum.

Three of the sutures were removed on the 9th, one on the 10th, and the remaining one on the 11th.

Adhesion has taken place (with the exception of an inch near the lower part) throughout the wound: the ligature is not yet come away. The urine and fæces are discharged without difficulty or assistance.

Her appetite is good; her health better than before the operation. We have no doubt of her ultimate recovery.

To Dr. Crookshank's kindness in taking her to his home, and the advantage she has derived from his constant attention, must be attributed, in a great measure, the mildness of the subsequent disturbance which she has experienced from this formidable operation.

The tumor weighed five lbs.; its external appearance resembled the human brain enveloped in the pia mater, upon dividing it, the interior appeared quite solid, resembling the mammary gland, having a dense white appearance, agreeing with Dr. Good's definition of the emphyma mammarium. It measured in its shortest circumference 15 inches, in its longest 22½. This case is not presented to the medical world, as containing anything original, but as affording, if it be requisite, an additional case to prove the practicability of extirpation by the long incision without incurring any greater risk than is hazarded in other capital operations.

The adhesions and solidity of the tumor would have rendered its extraction totally impossible by the short incision. The propriety of operating in the linea alba was manifested by finding the pedicle to be the right broad ligament, instead of the left as we expected from the history given by the patient.

*Harrison, O., August 18th,* 1844.

ART. 3.—*Causes of Death in Typhoid Fever.* By B. RUSH MITCHELL, M. D.

HAVING, in a former essay, endeavored to draw attention to the fact, that death takes place in fever, as a result of either inflammation or congestion, it would not seem amiss, to apply the principle to particular diseases of a febrile nature; since, by so doing, we might elicit some means of lessening the mortality, of these wide-spread affections; and, in as much as Typhoid Fever has domiciled itself among us, becoming an American—a Western malady—and one too frequently fatal, correct appreciation of *its* phenomena, would seem more desirable than those of any other; and we consequently propose to make it the subject of a few remarks

We are aware, that after the publication of Professor Bartlett's work upon this disease, anything further, would appear to some superfluous; but inasmuch as he and others, seem to look upon the essential character of the disease, as consisting in the intestinal lesion, it is but natural that by this they should seek to explain the cause of death. It has, however, been our good fortune, to have become some what conversant, practically, with this disease; and observation and reading have tended in no slight degree to produce the conviction that the *uncomplicated* lesion of the digestive tube—the *essential* of Typhoid, would cause death in a proportion, not near so large as the fever does, which we meet in our practice. The history of the disease, fully establishes this fact. The fewer remedies and the milder their character, that we direct to the diseased glands, the better the prospect of cure. In this particular, nature seems to say to the physician, "let me alone, you take care of the rest of the body, and I will manage this;" and he will be found most generally successful, who thus interprets and obeys, the voice of the vis medicatrix.

It seems indeed strange, that a part not distinguished for its necessity to life—not pre-eminently vital; that a part of this nature occupying so small a site, should, when diseased, possess so powerful a death-producing agency. We have been accustomed to see pa-

tients live long and ultimately recover, with the ordinary ileitis, and an instance presents itself to us, in which, the disease continued 12 months before death occurred, although diarrhœa was actively present all the time. Ilietis, according to the testimony of the best observers, is not remarkable for its fatality, if met by treatment at its onset; at least, not so much so, as Typhoid Fever, of which this lesion is supposed to be the characteristic; and we are entirely unable to discern any reason why it should be a frequent cause of death in the one case, and not in the other.

If we examine the statistics of mortality of Typhoid fever we will find that the most usual consequence of Typhoid ileitis is a slight ulceration; sometimes a bare thickening of the elliptical plates; a lesion surely, not a serious death-producer. Perforation of the intestine, is a rare occurrence. Louis found it in 8 of 55 cases, and this is the ordinary proportion. Strange too to tell, Dr. Bartlett informs us that the accident occurs *most commonly* in the *mild* cases of the disease, and in this statement he is borne out by the concurrent testimony of Chomel, and others. In grave cases, its occurrence is rather a phenomenon than an incident. Such being the fact connected with the intestinal lesion, it does not seem to us rational to explain death commonly, by its presence; for, were it to exist alone, the ratio of mortality would be but small.

There are, however, complications arising in almost every case of this fever; there are symptoms, the indications of which, are often overlooked, to which we may look for a solution of the question, Why is Typhoid fever, so fatal a disease? And of these, none are so prominent as those of the head and lungs, but more especially the former: for, of all the symptoms of this fever, those relating to the head, are the most universal. Headache is one of the most common premonitions, Louis having found it in 84 of 87 cases. And, as the disease progresses, the marks of cerebral disturbance, instead of becoming lessened by the progress of the intestinal lesion, are evidently increased. It is too, a remarkable, and not sufficiently dwelt upon fact, that the head symptoms are more marked in fatal cases, than otherwise. If this were not so, if we found them to be

and we look upon it as farther evident, that these two diseases will act upon each other, and increase the virulence of both; thus almost ensuring a fatal issue. Better, far better, we think it would be to subdue the one or the other, so that we may have a simple disease to treat, than one involving two or more important organs. And as the brain is the part which gives the first evidence of disease in Typhoid fever, and is the presiding genius and director of animal life, let us subdue, early and completely, each and every diseased manifestation, that we can detect. This is, to say the least, worthy of a trial.

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ART. 4.—*Case of Prolonged Singultus—Dilatation of Air-cells in left, and Atrophy of right Lung.* By JOHN BUTTERFIELD, M.D., Professor of Theory and Practice, and General and Special Pathology, in Willoughby University.

TUESDAY, P. M., 24th April, 1843. I was invited to be present at the autopsy of Miss N. C., who died last night at 9 o'clock. We obtained the following imperfect history. Subject is 32 years of age, and has always been sick since infancy, though this sickness was not described. About three years since, had a slight attack of hemiplegia, upon which side I could not learn. About a year ago she was attacked with singultus, which has continued, with some slight intervals, ever since. She was treated by several physicians, but without effect. This was the most urgent symptom, and was very distressing.

I did not learn whether it was intermitted during sleep or not. She has had for a long time, shortness of breathing, with breathlessness on any exertion. Right side perfectly flat on percussion, with absence of vesicular murmur, and strong tubal respiration.

On Saturday last was attacked with paralysis, commencing in the right arm, and increasing gradually till the whole right side, and eventually the whole body became paralyzed. Sunday evening she became entirely senseless, and had several convulsions during the night. Stertorous breathing came on Monday morning. During the day continued much the same, and expired about 9 o'clock, P. M. I did not see the patient during life.

*Autopsy* 19 *hours after death.*—Moderate embonpoint; right lung flat on percussion. *Brain.*—Extravasation of blood on the surface of both hemispheres, under the arachnoid, and between the convolutions. This extravasation was of very great extent, occupying a space nearly the size of the hand upon the superior portion of the left hemisphere, and reaching down nearly to the corpus callosum. Over the right, it was less extensive. The lateral ventricles were filled, but not strongly distended with serum. *Thorax.—Left lung* enormously large; cells dilated, readily seen through the pleura. This dilatation seemed to be universal, constituting the emphysema of Laennec. No tubercles; slight old adhesions of upper lobe. *Right lung* perfectly collapsed; carnified (a fine examaple); in its whole extent, *atrophied*, it being little larger than a large adult kidney. Bronchial tubes enlarged, hardened, ossified in points. Mucous membrane inflamed, indurated, and covered in portions with pus. Lung strongly adherent to the ribs. *Heart* much displaced, thrown almost entirely to the right of the mesian line, the apex being nearly under the centre of the sternum. *Valves* healthy except the mitral, which were somewhat thickened at their edges. *Liver* adherent to the diaphragm, somewhat softened, and darker in color than is natural. *Stomach and Intestines* of a natural appearance; not opened. *Kidneys and Spleen* healthy. *Uterus.*—Walls thickened, fibre cartilaginous in structure, cavity filled with a whitish and very viscid substance. From its anterior aspect projected a pedunculated fibrous tumor, about the size of an English walnut.

REMARKS.—The above case presents several points of interest. The paralysis, convulsions, etc., are sufficiently accounted for by the sanguineous extravasation upon the brain; this again was probably connected with the condition of the heart and lungs. The right lung had evidently been entirely useless for a long time. What the original affection of the lung was which resulted in the condition described above, I cannot tell, and what I could learn of the history, throws no light upon it. The dilatation of the air cells in the left lung, however obscure the pathology of dilatation may generally be, was here undoubtedly dependent upon the increased function thrown upon this

lung. The heart was displaced by the pressure of the left lung, assisted by the partial cavity formed in the right chest. What occasioned the prolonged singultus? The liver was adherent to some extent to the diaphragm, but the corresponding lung was not. Was it produced by the inflammation of the peritoneal covering of the liver extending to the diaphragm, or did it depend upon the necessarily irregular action of that muscle in respiration?

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ART. 4.—*Extraordinary case of Diseased Bladder.* By L. M. WHITING, M. D., Canton, O.

J. GORGAS, ESQ., a very respectable magistrate of this County, aged 71 years, tall and spare, temperament nervous, of good habits, and general health, has been troubled for about two years past, occasionally with frequent calls to void urine, but free from pain or other inconvenience whatever. As usual in such cases, the desire to evacuate the contents of the bladder has been increased by horse-back exercise, exposure to cold, damp states of the atmosphere, etc. On or about the 16th day of April, 1841, he was induced, contrary to his usual habits, to mount a horse and ride some miles from his residence to perform some of the functions of his office. The weather was cold, wet and disagreeable, and he found the calls to urinate during the day very frequent, and what was new, accompanied by pain in the region of the bladder. On his way home this latter symptom increased to such a degree, that he could no longer endure the motion of his horse; he therefore dismounted and walked for the distance of three miles. On his arrival, a physician, (or one who professes the healing art in the neighborhood) was called, who when he appeared at the bed-side, was informed by the patient that there had been no discharge from the bowels during the last four or five days—that he was suffering extreme pain of an acute character in the lower part of the abdomen and pelvis, which region was then enlarging its dimensions rapidly, and that the urine was dribbling away almost constantly, uncontrolled by the will. These symptoms were accompanied, as I am informed by very intelligent non-professional attendants, by a

quick hard pulse, heat of the surface and other indications of general inflammatory excitement. The prescription consisted almost entirely of a direction to apply hot and moist flannel over the seat of pain and swelling. Cathartics and enemata were expressly interdicted, and on a request being made by the sufferer for bloodletting, this was also refused. The latter was adopted, however, on a repetition of the request on the second day, but the urgent solicitation of the patient for the adoption of some means to evacuate the bowels was entirely unheeded or rather a new injunction was laid upon everything which tends to that result. The patient, however, being a man of strong sense, and feeling naturally a necessity for the accomplishment of this object, insisted upon the administration of enemeta by the members of his family in the absence of the Doctor (!): but after a few efforts without any of the expected results, the project was abandoned for the time. On the succeeding visit of the medical attendant, he was desired by the patient, contrary to his own advice, to administer an injection which he finally did, and upon its passing off very soon without the accompaniment of fæcal matter, he declared most confidently, that there was "nothing there to come away" and that it was the height of folly to persist in the endeavor to procure stools. Repeating his directions in reference to heat and moisture, and ordering a weak solution of crem. tart. as a drink, he took his leave. Disregarding all the professional counsel of his attendant in relation to the state of the alimentary canal, the patient commenced taking Ol. Ric. in moderate doses, and continued so to do at intervals of a few hours until about ℥iv. had been introduced. Some cathartic pills were then resorted to, and enemata of a mild character frequently thrown into the rectum. The steady perseverance of the patient in this course for a few hours resulted in appropriate action, and six or seven stools were procured exhaling an intolerable odor, and the first discharge giving him excruciating agony from its compactness and size. Four days had now elapsed since the attack, and eight or nine since the last previous alvine discharge. From this time the pain subsided fast, and strong hopes were entertained of speedy recovery. But there remained great tumefaction of the ab-

domen, almost constant uncontrollable dribbling of urine tinged with blood, which symptoms not yielding to any remedial means which were adopted, the friends of the patient were induced, after the lapse of two or three days more, to send for other medical aid.

On the 21st of April I saw him for the first time. The abdomen at this time presented externally the appearance of an enormously distended bladder, the form of that organ being striking, preserved in the tumefaction, and at a glance, I was satisfied that *retention* existed to an alarming extent, and that a catheter, could it be introduced, would diminish the size of the tumefaction very much: but on subjecting the abdomen to manual examination, there was a feeling of hardness approximating scirrhus very closely, hardly any elasticity on pressure, and very little pain complained of. This confused my mind in regard to the condition of the organ, but without further hesitation, the catheter was introduced, but not a drop of urine flowed. The urethra was free from obstruction, and no part of the passage seemed to be in a state of much irritation. What is the pathological condition of the bladder? was a query which continually revolved in my mind, but which I was then and still am unable satisfactorily to answer. That there was considerable enlargement and induration of the prostate was evident upon examination and in passing the catheter, but as to the bladder itself, every means which came within the range of my knowledge as calculated to throw light upon the condition were resorted to without developing anything upon which to base treatment especially directed to that organ. When lying upon his back, the extreme upper portion of the tumefaction, representing accurately the form of the organ in question, came very nearly in contact with the ensiform cartilage, and from this highest point, a line was drawn to the junction of the ossa pubes, which measured *fourteen inches*: another passed from side to side of the enlargement across its center, measured *ten and one half inches*. The patient being inclined to lie mainly upon the right side, the right lower extremity became œdæmatous to a great degree from mechanical obstruction to the return of blood by pressure of the enlargement upon the venous trunks of that side. On changing the recumbent

position to the left side, the same effect followed to that lower extremity.

There was *extraordinary watchfulness*: the patient whose mind seemed to be perfectly clear, and his attendants who were persons in whom the utmost confidence could be placed, declaring, that during the week which had elapsed when I saw him he had not been asleep to exceed *twenty minutes*: and yet there was very little or none at all of that peculiar irritability, or exhaustion about him which usually succeed the loss of sleep. The pulse was regularly intermittent; every fifth or sixth pulsation losing two beats. This, however, was a natural phenomenon, having always existed from the earliest recollection of the patient. After some days passed in the use of those agents which have been supposed to exert a peculiar influence upon the bladder without the slightest apparent benefit, I concluded to make an application of ung. iod. and hyd. pot. over the whole surface of the enlargement on the supposition that the pathological condition might be pure hypertrophy.

Frictions with the preparation, as strong as could be borne by the skin were made three times a day for a week, when the tumefaction began evidently to decline, but with its subsidence the powers of the system seemed strongly disposed to go down. A very troublesome burning sensation referable to the stomach came on four or five days after my first visit, and continued throughout the subsequent course of the disease, uninfluenced, except temporarily, by medication. On the 28th he had a severe chill followed by high febrile excitement, and subsequent increased debility: nourishing diet and tonics were given freely. The urine continued to pass *guttatim*, with an occasional sudden momentary current, extremely high colored, and generally tinged with blood distinctly. No pain at all on handling or pressing the enlargement, which continued to decline rapidly in size and induration until about the 20th of May, when it appeared to be nearly or quite gone and the iodine frictions were suspended. But with the decline of the tumefied appearance of the abdomen, had the general powers of the body also declined in spite of our utmost endeavors to sustain them. Chills continued to harrass our patient at irregular intervals,

and always with an exceedingly depressing effect. The burning sensation at the stomach made the introduction of food or medicine very obnoxious to him. Nothing extraordinary appeared in the character of the discharges from the bowels, except that they became more frequent after they were first moved, as above stated, than he had been accustomed to; his habit for years having been constipation. The sleeplessness alluded to already, continued throughout the whole course of the disease, but not so uninterruptedly as during the first ten or twelve days, during which he slept almost literally none at all, and yet the uniform answer to enquiries in relation to the effect of this state upon him was, that he did not feel the want of sleep, or if he did it was very slight. With a regularly increasing downward tendency he remained until the 27th of May, when death, an event which for many days he had been wishing, supervened.

*Autopsy 24 hours after death.*—The examination was necessarily partial. It was obtained with some difficulty, and being made in the presence of some of the members of the family, was not extended so far as it might have been under other circumstances. Suffice it to say that no very strange developments were made by looking at the organs, which during life had undergone such changes. The bladder was found of the usual size and contained about a half a pint of turbid and fœtid urine, the walls of the organ were slightly thickened, the mucous membrane was entire, but broken up with facility by the fingers. Several lines, varying in width from an eighth to half an inch, appeared upon the anterior part of the organ, extending from various points upon the fundus, and converging to the neck. Their color was black inclining to blue, but on being cut into, the structure appeared as firm as any other portions of the organ. The prostrate gland was enlarged and indurated, especially the middle lobe. Kidneys healthy. Stomach looked well with the exception of the faintest possible blush over a small space on the mucous surface of the great cul-de-sac. Other contents of the abdomen normal. Thorax not opened.

REMARKS, INQUIRIES, ETC.—The first impression made upon the mind by looking at the history of this case, is the painful one, that

probably the life of a valuable citizen was sacrificed for the want of judicious treatment at the onset of his disease. The symptoms of violent local inflammation were clear and not to be mistaken by any thing short of the stupidity of an inebriate, or the most stultified ignorance: yet not a single prompt energetic measure for its reduction was adopted. Had the bowels been promptly, and freely evacuated, depletion local and general practiced, with the appropriate concomitant antiphlogistic treatment, the consecutive evils which appeared in this case would never have been exhibited, and community, for the present, would have been saved an estimable member, and a most worthy family, a kind husband and father. Such instances (and they are of every day occurrence) call loudly for some tribunal before which individuals who propose to take upon themselves the management of the "ills which flesh is heir to," can be compelled to appear, and give evidence of their capability for the great and responsible work before them, or abandon their pretensions to public confidence.

But there are some points, as I conceive, of especial curiosity to the pathologist in this case; to wit:—

1*st.* The rapidity with which the organ acquired the extraordinary size; not more than two days having elapsed, before it had attained to dimensions equal almost to the entire capacity of distension possessed by the flexible parietes of the abdominal cavity, and threatening constantly, the safety of the viscera in that cavity, by its bulk and pressure.

2*nd.* The almost entire absence of pain or uneasiness in the enlarged organ, soon after the operation of cathartics was procured, though subjected frequently to severe exmination.

3*rd.* The *extreme solidity* of the organ to the feel; pressure making but the slightest impression upon it, though carried to a great extent.

4*th.* The retention of its great size and hardness, for so long a period after the decline of the symptoms of inflammation.

5*th.* What were the precise conditions through which the bladder passed? It seems to me, that some strong objections might be urged against the idea that the great increase in size, was simply *swelling*.

6*th.* Did the iodine and hyd. of pot. have anything to do with the removal of the enlargement?

ART. 6.—*Case of Inflammatory Articular Rheumatism.* By A. R. HARRISON, M. D.

D. R.; admitted into the Commercial Hospital, December 6th, 1843, æt. 36 years—a comedian—has had inflammatory rheumatism of the joints, for the last 5 years, which has become so severe, that he has not been able to follow his business for the last year. Has been in the habit of taking morphine, and of drinking spirits freely for his pains. Has had "mania a potu," and has been ptyalised. His present symptoms are, great pain in the right hip and elbow, which is increased on the slightest motion. The elbow joint some inflamed; pain in the knees and shoulder; unable to bring his hands into the extended position; does not rest well at night. He was directed 15 grs. of Dover's powder at bed time. On the 8*th*, appears about the same. The bowels being costive, he was ordered 6 cathartic pills. The Doveri to be repeated at bed time.

*Dec.* 9*th*.—Cathartic operated; pains in the joints increased; was ordered to be taken every hour, 1 gr. tart. of antimony, with 10 gtts. of laudanum. If too much nauseated, the dose of antimony to be decreased.

10*th*.—Pulse, 100; skin hot; much iuflammation and tenderness of the right wrist, left thumb, and right instep, also of both knees. The tart. of ant. has acted pretty freely upon his bowels; was ordered half a tea-spoonful of the wine of colchicum every fourth hour; one grain of opium, to be taken at bed time.

12*th*.—Rheumatism somewhat better; to take the colchicum every third hour, and opiate at bed time.

13*th*.—On the whole, appears better, but he had no sleep last night, although he took two grains of opium. To take one-half tea-spoonful of the wine of colchicum, and 10 gtts. of laudanum, every fourth hour, and an opiate at bed time.

15*th*.—Better. Continued last prescription.

16*th*.—Pulse 96; no rheumatism, except in his right knee; expression of his countenance is better; continue last prescription.

18*th* and 20*th*.—the same report.

21*st*.—Joints better, but he is very restless, and much distressed in mind; great sleeplessness; colchicum acts too much on his bowels; talks of the theatre, and of his not being able to sustain his part, on account of his rheumatism. To take a tea-spoonful of the ammoniated tinct. of guiacum, with 15 gtts. of laudanum every fourth hour, and an opiate at bed time.

24*th*.—No abatement of the last mentioned symptoms; has great difficulty in articulating his words, and at times, a complete loss of voice.

28*th*.—The last symptoms continued with little abatement until this morning at 6 o'clock, when he died.

*Post Obit. Examination*.—It is much to be regretted, that there was no examination made, farther than that of the brain, in this case, in which the only morbid appearance found, was a turgescence of the veins, about the origin, so as to produce compression of the eighth pair of nerves,

By glancing at the prominent symptoms of this case, it will readily be observed, with what difficulty we could pursue any thing like a successful course of treatment, from the previous habits of our patient. For, when the opiates were decreased in quantity, decided symptoms of delirium tremens came on; for, he had been accustomed to an enormous quantity of morphia, daily; keeping it in his pocket, the whole time, to use according to his pains.

## SURGERY AND OPHTHALMOLOGY.

Art. 7.—*Tenotomy—its abuse, and the results*.—M. Malgaigne addressed to the French Academy of Sciences, Feb. 19th, last, the following communication on the abuse and danger of tenotomy in certain deformities. It presents a picture of what has been boastingly called the operative surgery of the day, little creditable, we will not say to surgical science, but to the operators of the present day, and which, if we may judge from what has been enacted in this country, in no respect exaggerated.

"The Royal Academy of Sciences was informed some years since

of the alleged primary results of certain operations, marvellous in their nature; their innocence, and in the ultimate consequences which there was reason to hope they would lead to, or which it was said they had in some cases actually led to. Thus, on January 20th, 1840, there was communicated to the Academy the history of a girl, aged fourteen, in whom *fifteen* different tendons were divided at one sitting; and a few months later, this hardy proceeding was quite outdone by another of the same kind, performed on a man, aged twenty-two, in whom *forty-two* muscles and tendons were divided, so to say, at once. In the first patient the object in view was to correct two incomplete luxations of the knees; and the day after the operation, this, it was said, was so completely effected, "that the only remains of the two deformities was a certain amount of permanent flexion of the joints." The nature of the deformity in the second case was not stated, and the result remained to be seen; it was promised that whatever it was, it should be communicated to the Academy at a fitting time.

"Nearly four years, however, have now passed by, and that fitting time has not yet come, and I certainly should not have reminded the Academy of those unfinished cases, were it not that an attempt has been recently made to give currency and credit to a surgical doctrine which seems to me fraught with most dangerous consequences, and respecting which the two facts above alluded to, together with some others, may tend to edify and instruct practitioners. The question is, whether it is allowable to divide tendons and muscles in deformities produced or kept up by paralysis, and without examining that question thoroughly, I shall just state the results the practice has already led to.

"The girl, aged fourteen, who had *fifteen* tendinous sections first performed on her, and was subsequently subjected to *five* others was an unfortunate paralytic inmate of Salpetriere, where she still continues. All her limbs were more or less contracted; she was affected with club-foot, luxations of the knees, flexion of the forearms and of the fingers; she presented an example of almost every variety of deformity, coupled with irremediable paralysis. The luxation of the knees was the first deformity attacked; and whether

it is that the operator labored under some illusion, or that the luxations returned after being removed, certain it is that they exist at present. The club-feet were next operated on, but they also remain at the present instant. One of the contracted hands was next dealt with; and the operations were carried no further, merely because the patient absolutely refused to submit to any more.

"What has been gained by those twenty sections of tendons and muscles? Absolutely nothing. Something, however, has been lost; for the patient experiences in both legs, at the point where tenotomy was performed, acute pain from which she did not previously suffer; before the operation on the right hand, she was able to work at her needle the entire day, but now she is unable to work at all. She left the orthopedic wards of the Hopital des Enfans, 29th June 1840, and two months after this first experiment, the second was instituted on the young man, aged twenty-two, above mentioned.

"This patient was even more impotent and paralytic than the other; all his limbs were bent, and it was proposed to straighten them all. Despite all my researches, I could not accurately ascertain how it has fared with this patient. Every one knows of the operation, but then the results have been carefully concealed from every one. I shall not allude to the various reports circulated on the subject, as I wish to confine myself to what is accurately true.

"But we have the complete history of a similar operation performed in a similar case by an honorable and conscientious surgeon. The patient was a child, aged 11, affected with paralysis and contraction of all its limbs, but at least retaining the power of inclining the trunk forwards, backwards, and to each side. M. Phillips, misled by the example set him, divided all the contracted tendons, straightened all the flexed joints, and the result was, that, the unfortunate child, straight as a bar of iron, the arms glued against the trunk, lost the limited power of motion formerly possessed by the entire body, and lies on the bed like a dead body, the head alone enjoying motion—a frightful picture on which the mind is unwilling to dwell.

"Between the 1st of August, 1839, and the 1st of July, 1843, six patients affected with paralysis, more or less complete, have been

admitted into the orthopedic wards of the Hopital des Enfans. In four of the cases there seems to have been general paralysis. One was the girl whose case has been already alluded to; a second remained in hospital six days only; the two others died in the hospital. In the two other cases the paralysis only affected the foot or the lower extremities; one I have been unable to trace; in the other the tendo-achillis was divided, but the club-foot and paralysis remain as before.

I thought it important to communicate these results to the Academy, as it was to this learned body that such contrary results were partly announced, and partly promised. It is time that a due estimate should be performed of these hazardous attempts, and I intend shortly to address another letter to the Academy on the abuse and danger of myotomy in the treatment of lateral deformities of the spine.—[Amer. Jour. Med. Science.

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Art. 8.—*Amputation of the entire Scapulum.*—M. Rigaud, Professor of Clinical Surgery at the Faculty of Strasburgh, forwarded to the Academy the model of a scalpulum which he had taken away, along with a portion of the clavicle, from a man 51 years of age. The patient, a grenadier of the Imperial Guard, bore, in 1841, a tumor of the superior portion of the left arm, which necessitated amputation at the shoulder-joint, an operation which M. Rigaud performed. The wound resulting from the operation healed, and the patient was well during eight months. At that epoch an osseous tumor formed in the axillary region, evidently proceeding from the anterior angle of the scapulum. M. Rigaud thought it necessary to take off the entire scapulum along with the external extremity of the clavicula. This laborious operation was performed successfully in 1842; the patient recovered in the course of two months, and has ever since enjoyed good health.—[Bost. Med. and Surg. Jour., from London Lancet.

ART. 9.—*New Instrument for Crushing Calculi in the Bladder.*—[Mr. Simpson, the ingenious surgical instrument maker in the Strand, describes this instrument in a letter to the editor of the Medico-Chirurgical Review, as follows:—]

Having been applied to a few weeks back in a case where the stone was supposed to be too large to extract without first breaking it, and as the instruments that have been hitherto made have proved useless, in consequence of the difficulty, or rather impossibility of opening the blades of the forceps after their introduction into the bladder, so as to grasp and crush the stone, partly from the great thickness of the blades, and partly from their being fixed together, I have constructed the instrument described in the following lines, from which I consider it will be obvious, that as the blades are introduced separately, and the stone may be comparatively easily crushed, the important and so long desired object is at length attained, namely, of being enabled to break up a large stone, and extract it by fragments, without greater danger than that usually attending the ordinary operation of lithotomy.

This instrument which is for the purpose of crushing calculi that are found to be too large to extract by the ordinary operation of lithotomy, consists of two strong curved, flattish blades, rather more than three inches in length, which, together with the handles, makes the whole length of the instrument about fourteen inches. The blades are introduced into the bladder separately, so as to get round a large stone more easily. After the stone is seized between the blades, they are locked or connected together by means of a button joint, something similar to that of Rigby's midwifery forceps. They then resemble a pair of very strong, large-sized lithotomy forceps. After the blades are locked together, a flattish bar with a small screw cut on the edges, is fixed by means of a screw to one side of the forceps, and passed through an opening made for it on the other. On this screw and outside the handles of the forceps, a washer is first placed, and then the handle with the female screw is put on the bar, and by turning it on the screw bar, the handles and blades are gradually closed together. Should the stone not be very hard, this power may be sufficient to

crush it, but if not, a slide fits into an opening in the screw bar that serves to close the blades. This slide fixes by means of a screw, in the center, according to the width the blades may be opened, and a drill is passed through the hole in the slide, (in which a screw is cut for the purpose,) and also through a swivel at the lower end of the forceps, almost under the joint. A blunt gorget may be passed into the bladder to guide the drill, and prevent its touching any part of the wound. The handle of the drill is then turned round and round, till it arrives at a stop placed on the drill to prevent its passing beyond the ends of the blades of the forceps, and injuring the bladder, thus boring away the center of the stone, and consequently considerably weakening it. The blades may then be closed by turning the handle on the screw bar, and thus crush the stone to pieces. Should the first hole not weaken the stone sufficiently, the forceps can be opened, and the stone loosed from their grasp, and by moving the stone, and seizing it in a different position, bore another hole, but the probability is, that in most cases, the one hole would be found quite sufficient. The stone having been broken into small pieces, these can then be extracted by the usual forceps or scoop in the ordinary way. The length of the incision in the bladder required to introduce and use these forceps, is not more than that usually made for the ordinary operation in the average of lithotomy cases.

There is also another pair of forceps of about the same length, but with straight blades, and made much stronger, to be used in the same manner as those already described, but so as to enable the operator to crush the stone, without having recourse to the drill at all.—[Braithwaite's Retrospect, from Med. Chi. Rev., April, 1844, p, 576.

## MIDWIFERY.

Art. 10.—*Effects of Ergot on the Fœtus in the utero.* By T. E. Beatty, M. D., Fellow of and Professor of Midwifery to the Royal College of Surgeons in Ireland.

[Dr. Beatty thinks, with many other respectable practitioners, that ergot of rye produces a noxious influence on the nervous system of

the infant during parturition; and to this effect may be attributed its fatal tendency in many cases, independent of the asphyxia which is evidently produced in other cases by the continued and uninterrupted action of the womb for a certain length of time. Dr. Beatty relates a number of cases, and concludes that in most cases, if the labor be accomplished within *two hours* after the exhibition of the medicine, the bad effects on the child will not be seen: on the contrary when the time exceeds two hours, the danger to the child will be great. "The effects are certain spasmodic conditions of the muscles of the whole body, alternating with relaxation or palsy, and accompanied by evidences of derangement of the functions of the cebro-spinal system," produced, according to Dr. Beatty's opinion, by "a direct poisonous effect on the infant before delivery." After relating a number of cases to elucidate his opinions, Dr. Beatty says—

In the cases just recorded, the condition of the infants was very unlike that of still-born children delivered under ordinary circumstances, and when no ergot had been administered to the mother. *The distinguishing characteristics are, the general lividity of the surface, the universal rigidity of the muscular system, producing the stiffened limbs and clenched hands in those infants in whom life was extinguished; and the remarkable kind of alternating spasm and palsy which supervened in those that were resuscitated.* The nearest approach to this state in new-born children, and that which most resembles it, is the condition in which children are born dead, with symptoms of congestion of the cerebral vessels, in whom it is true, we find the countenance suffused and livid, but the peculiar affection of the muscular and nervous system is wanting. Children presenting this appearance of congestion are usually born after difficult labor; but in the instances above detailed this was not the case, some of them were tedious, but none of them difficult.

That the *fœtus in utero* is capable of being influenced by the circulating fluids of the mother, is proved by the well-known fact, of the communication of syphilis, small-pox, etc., to the unborn child; and that substances taken into the stomach of the mother can effect the infant, is shown by the experiments of Majendie, who found in the

fœtus of animals the odor of camphor, and the color of madder, with which he had fed the mothers. It is still further established by the case reported by M. D'Outrepont, of a fœtus poisoned by opium taken by the mother.

Admitting this point to be established, it remains to be seen whether the effects described above, and imputed to the direct agency of the ergot of rye, bear any resemblance to the effects produced by the introduction of this drug into the circulation. Upon this point we have very satisfactory information in the elaborate essay of Mr. Wright, already alluded to. Before proceeding to recount the results of his experiments, he takes notice of some of the epidemics of *spasmodic ergotism*, caused by eating bread made of rye containing a large portion of ergot, which visited different parts of the Continent during the last century. This disease almost devasted Freybourg, and overran many of the Cantons of Lusatia, Saxony, and Sweden. According to Videlius, the patients were attacked with spasms and convulsions, accompanied with violent pains, which were said to equal those of luxation, and to be similar in their type. In some instances the patients became lethargic, and when recovering from such state gave respectively signs of stupidity, intoxication, and extreme lassitude, after which the fit subsided for a time. But there generally remained vertigo, *tinnitus aurium*, *nebulæ occulorum*, rigidity of the members and excessive feebleness.

[The effects of this medicine, when introduced into the circulation, may be learnt from the experiment of Mr. Wright.]

It is plain that the longer the time that elapses after the medicine has been taken into the stomach of the mother, the more certainly will its noxious principles be absorbed and mixed with her blood, the more certainly also will these principles be transmitted to the fœtus by the constantly existing current of blood through the umbilical vein and the more likely will the fœtus be to suffer from their effects. From these observations I think we are justified in coming to the conclusion, that the administration of ergot of rye to a woman in labor is attended with dangers to the child, whenever a time sufficient for the absorption and transmission of its noxious properties elapses

before the child is born; and from the cases above stated I am inclined to place two hours as the limit of safety, and to consider a prolongation of labor beyond that period as perilous to the infant.—[Braithwaite's Retrospect, from the Dublin Journal of Medical Science, May, 1844, p. 218.

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Art. 11.—*Puerperal Fever.*—By Robert Storrs, Esq., Doncaster.—[We publish the substance of Mr. Storr's paper, not so much to prove the contagiousness of certain forms of puerperal fever, respecting which opinion there can be very little doubt, but to show the mode by which the practitioner may carry the contagion from one patient to another: and we would particularly call the attention of every obstetric practitioner to this interesting subject. Mr. Storrs thinks that medical men do not go far enough in considering this disease to be propagated by medical men and nurses from one puerperal patient to another. He thinks that it is quite as frequently carried by the medical attendant to each fresh labor-case from some original infectious case, whether of gandgrenous erysipelas, or typhus fever, or of whatever animal poison besides may hereafter be found to produce it. In some cases which occurred in his own practice, he has no doubt that he took it to each patient from a case of gangrenous erysipelas with subsequent abscess, which he was attending at the time of these unfortunate occurrences. And such may be the case of other practitioners. They think that they convey the contagion from one puerperal patient to another, instead of from one common source. They probably lose a puerperal case and immediately take every precaution to prevent a similar occurrence, by careful ablution, and a complete change of dress. Nevertheless the next case of labor is attended with the same fatal result; simply because the practitioner is still in attendance on the case which originally gave rise to the mischief. Mr. Storrs was not only himself convinced of this fact, but wished to ascertain the experience of other practitioners, and for this purpose he wrote to several of those who had met with the disease in their practice. Among the rest to Mr. Reedal, of Sheffield, from whom he received the following remarks.]

At the time of my attendance on those females who were subsequently attacked, I had under my care a young man laboring under sloughing bubo, combined with erysipelatous inflammation of the scrotum and nates, of a malignant character, which required dressing daily, and which ultimately proved fatal. It may be somewhat corroborative of the supposed dependence of this form of puerperal fever on an animal poison generated by this sore, and propagated by contact, that the sister of the young man, who waited upon him, was seized with erysipelas of the head and face, of a very low, typhoid nature, which terminated fatally in a few days.

It would be unnecessary in me to repeat my implicit belief in the contagiousness of this disease, and its connection with this case of erysipelas; but if further confirmation were needed, I might adduce the circumstance, that immediately antecedent to my taking the charge of the above case of erysipelas, I had met with no cases of puerperal fever, and that upon discontinuing my attendance upon the young man (which I immediately did upon the belief that I was the medium of conveying infection from him to the puerperal cases,) I had no recurrence of the puerperal fever.

I may give it as my opinion, that in all my cases the disease had one common origin, viz., the bubo, and was not communicated from case to case. I should also wish to state that at the same time those cases occurred to me, Mr. Parker, then my pupil, but now resident in Sheffield, attended many midwifery cases, and all recovered well. He never visited the erysipelatous patient. The above cases were not confined to one locality, but were living in different parts of the town, showing that the disease did not arise from any local cause. As I have previously stated I had very strong suspicion, after the first case or two, that I was conveying the infection, but could not discover how until the sister was seized. This was the most malignant case of erysipelas I ever witnessed. I then began to think whether I was not conveying the poison from this source.

[In these as well as in all other cases reported, treatment proved unavailing. Mr. Storrs proceeds to say—]

Three surgeons, residing in the same town, attended the post-mortem examination of a patient who had died from gangrene after an

operation for strangulated hernia, and were all of them employed in handling the diseased parts. One of them was called from the inspection to a case of labor, which terminated in fatal puerperal fever; he had others in rapid succession. The other two surgeons had also fatal cases of puerperal fever within a day or two after the same inspection. On casually meeting, they mentioned their misfortunes to each other, and were thus convinced of the origin of the disease. They all abandoned practice for a short period, and had no more of it. I would here briefly draw the attention of the reader to the remarkable and striking fact of Mr. Reedal having five fatal cases of this horrid malady in labors which he attended so immediately after dressing a case of malignant erysipelatous disease, and on his leaving off attendance on this case having no more of it, and that neither his pupil even, nor any other medical gentleman in Sheffield, had any instances of it among their labor cases; also that Mr. Sleight had two cases while in attendance on a case of erysipelas; that Mr. Hardey's cases also arose while he was in attendance on a case of sloughing abscess and of erysipelas. And again, that three surgeons were simultaneously the means of spreading puerperal fever from one post-mortem examination of a case of gangrenous erysipelas—a combination of evidence I think sufficient to convince the most skeptical that this disease produces a subtle animal poison, which is instrumental in propagating, when puerperal women are subjected to its influence whose predisposition favours it, a disease in about thirty-six or forty-eight hours afterwards of the most inflammatory, prostrating, and violent character—a disease which stamps death on the features and in the symptoms immediately on its occurrence.

[Mr. Storrs next enumerates a great many cases recorded by different practitioners, all of which prove that each disease had a common origin from some case of erysipelas or sloughing ulcer. He concludes his very interesting paper with the following advice.]

As it is well to be always guarded against such a misfortune, I think it desirable for midwifery practitioners to avoid attending labors in the same dress in which they attend their ordinary patients, especially

the coat, as this garment must be the one most likely to be the means of conveying fomites; and at any suspicious period, when typhus or erysipelas are prevailing, to carry out the same carefulness even in the after-attendance on labor cases. I should also, after a post-mortem of any kind, or after any operation upon any case of erysipelas, or of typhus, recommend the most careful ablutions of the hands, and for the surgeon to avoid attending on a labor in any part of the dress in which such operations have been performed, not forgetting the gloves, as the hand and arm are the chief instruments of contact. Where, however, the disease has been unfortunately once set up in a practice, an absence from home for a fortnight or three weeks, a total change of raiment, the most careful ablutions, and a perfect avoidance of every case likely to have been the source of animal poison, should alike be adopted by the practitioner.—[Braithwaite's Retrospect from Prov. Med. Jour., Dec. 2, 1843, p. 163.

[In the Provincial Journal for January 13, 1844, p. 287, Mr. Elkington, of Birmingham, relates several cases which in a remarkable degree confirm the previous facts and opinons.]

## BIBLIOGRAPHICAL NOTICES.

Art. 12.—*A System of Human Anatomy, General and Special.* By Erasmus Wilson, M. D., Lecturer on Anatomy: London. Second American Edition, edited by *Paul B. Goddard, A. M., M. D.*, Lecturer on Anatomy, and Demonstrator in the University of Pennsylvania, Member of the American Philosophical Society, Academy of Natural Sciences, Philadelphia Medical Society, etc., etc. With over 200 Illustrations by Gilbert. From the Second London Edition. Philadelphia: Lea & Blanchard. 1844. pp. 607.

It is certainly highly gratifying to the American Editor, that a second edition of Wilson's Anatomy has been called for in the brief period of two years; and it is certainly not less pleasing to the reader to find several valuable additions to the present issue. The principle additions by the author, are in the chapters on the ligaments, muscles,

nervous system, organs of sense, and the viscera. The Editor has introduced a preliminary chapter on *Histology*, including the recent views of the formation of the various tissue from cells. This department of anatomy is of the highest importance in forming correct opinions in physiology; and although the subject is still progressive, enough is known to give it great interest, and an elementary work on anatomy would be incomplete without adverting to it.

Public opinion has already declared that Wilson's is one of the best systems of anatomy for the student, belonging to our language. The descriptions are plain and accurate, and so condensed, that while nothing of importance is omitted, the whole subject occupies a comparatively short space, and the student is not bewildered by a useless verbosity.

The illustrations, originally by Bagg, have been copied in the most faithful manner by Gilbert; the whole presenting a beauty and accuracy seldom equalled.

For sale by Messrs. Desilver & Burr, 112, Main Street.

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Art. 13.—*A Manual of Chemistry:* containing a condensed view of the present state of the science; with copious references to more extended treatises, original papers, etc.; intended as a text book for Medical Schools, Colleges, and Academies. By Lewis C. Beck, M. D., Professor of Chemistry, in Rutgers College, New Jersey, and in the Albany Medical College. Fourth Edition, Revised and Illustrated with numerous wood-cuts. New York: W. E. Dean. 1844. pp. 480.

This work is intended especially for students, and as a text book for teachers. With this object in view, it is arranged in a condensed form, with copious references to other systems, and original papers. It is divided into ten chapters, embracing the following subjects: Attraction, Caloric, Light, Electricity and Galvanism, Magnetism, Electro-Magnetism, Magneto and Thermo-Electricity, Classification of Chemical Elements, Laws of Combination, Chemical Nomenclature and Notation, Non-Metalic Elements and their Compounds with each

other, Metalic Elements and their Compounds, Vegetable Substances, Animal Substances.

The above arrangement is, in many respects, a very eligible one; it possesses the merit of anticipating nothing that has not been discussed; and the student is not embarrassed by references to subjects altogether new. Thus, for example, in chapter vii, which treats of the non-metalic elements and their combinations with *each other*, *oxygen* is first introduced; then follows *chlorine*, and next, the compounds of these two substances—hyperchlorous, chlorous, chloric and perchloric acid. The next element is *bromine* and its compounds with the two preceding agents, forming *bromic* acid, chloride of bromine. Then follows *iodine* and its compounds, iodic acid, periodic acid, chlorides of iodine, and bromides of iodine.

In this progressive manner the student is gradually advanced from one subject to another, without anticipating those that are new, until the whole is presented. This arrangement is evidently a judicious one, and cannot fail to prove beneficial to the student.

In 1832, Professor Mitchell published in Cincinnati, a very excellent treatise on Chemistry, in which the same arrangement was adopted, and we believe, properly appreciated by those who had the good fortune to obtain a copy of that work.

Professor Beck's Manual is evidently an accurate and comprehensive system, but its limited extent renders it rather too brief for its professed objects; and we would respectfully suggest the propriety, when another edition is called for, of extending those subjects most useful to the medical student. It is, however, an excellent system, and we do not know one that can fully supply its place. The student, practioner, and lecturer, will find it for brief reference, of great value, and especially, will the student find it serviceable, while he is in attendance upon lectures, and the copious references will greatly facilitate more extended studies. For sale by George Cox, Main St.

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ART. 14.—*On Superstitions connected with the History and Practice of Medicine and Surgery.* By THOMAS JOSEPH PETTIGREW, F. R. S., F. S. A., Doctor of Philosophy, of the University of Göttengen, Surgeon to H. R. H. the Duchess of Kent, to the Asylum for Female Orphans, etc. Philadelphia: Ed. Barrington and Geo. D. Haswell. 1844. pp. 213.

IT is useful and instructive to the physician to learn the extent of

superstition that has heretofore been attached to Medicine and Surgery. Every one *feels* the vast amount of error and superstition that *now* sways the popular opinion of medical practice. The opportunities are so numerous, and the adventurers so reckless, that no department of business or science is so weighed down with false doctrines as that of medicine—a science that above all others remains free from every form of falsehood and deception. But of all others, practical medicine is selected by the ignorant and wicked, as best suited to their nefarious designs; here cupidity revels in unbounded pleasure, and ignorance flourishes in the midst of desolation and death. Truly may we exclaim—

Mr. Pettigrew has compiled a very good view of these superstitions, and presents them in a form sufficiently condensed to answer our purpose, without an *unnecessary* waste of time in its perusal. He treats of Alchemy, Astrology, Talismans, Amulets, Charms, the influence of the mind upon the body, Royal gift of healing, sympathetic cures, etc.

It is in vain that we declaim against impositions in medicine; the subjects of this detestable vice glory in their own shame and ruin. If we point to the miserable emperics, we are scorned as dishonest or as ourselves duped. Still it is our duty as philanthropists to resist, on all proper occasions, the march of empiricism and superstition; and although we may not hope to eradicate the evil, yet some of its effects may be counteracted or mitigated. The language of Southey, quoted at the beginning of this work is too true: "Man is a dupeable being. Quacks in medicine, quacks in religion, quacks in politics, know this, and act upon that knowledge. There is scarcely any one who may not, like a trout, be taken by tickling."

The above work can be had of Messrs. Desilver & Burr, 112 Main Street.

# THE WESTERN LANCET.

CINCINNATI, OCTOBER, 1844.

TO CORRESPONDENTS.

Our correspondents are requested to direct all their communications after the 1st day of November to Lexington, Ky., which will then be the editor's residence. Books intended for review can be forwarded to the care of Messrs. A. T. Skillman & Son.

Messrs. Robinson & Jones, No. 109, Main Street, Cincinnati, are agents for the Lancet, and are authorized to receipt for payments. Persons visiting Cincinnati, or having opportunities of making remittances by private conveyances, can, if they prefer it, make payment to the above named agents; but all letters sent by mail should be addressed to the Editor at Lexington.

Those who are in arrears for the Lancet, are earnestly requested to make immediate payment. A moment's reflection will convince every subscriber of the necessity of paying their arrearages, and we shall expect those who really wish the work to prosper, to give us substantial evidence of their good wishes by making the necessary payments. Those who have been called on by our travelling agents need not wait for a second call, but we request them to remit directly to the Editor, for months may elapse before the agents will again see them.

Where the money is regularly mailed, it is at our risk, and therefore no fears need be entertained of losses, the Post Master's testimony being sufficient evidence that the remittance was made. *Local agents* are requested to make collections as early as possible.

Mr. A. P. Burts is authorized, as a traveling agent, to receive subscriptions, and receipt for money.

PROSPECTS OF MEDICAL SCHOOLS.—We learn by private information from Transylvania University, that students are coming in rapidly, a larger number being in attendance upon the October lectures, than at any former period. From present indications a large class will be present during the ensuing session, notwithstanding the croaking of some *special friends* of the institution, who have gone far out of their appropriate spheres to injure the School.

In Cincinnati, students are also arriving in goodly numbers, and the prospects of a large class are highly flattering.

We have private information from Willoughby University, that a larger class than at any former session is attending the preliminary lectures, and the friends of the Institution are sanguine that a larger class than any of the preceding will be in attendance the ensuing session.

The Western Journal of Medicine and Surgery, regards the prospects at Louisville as favorable for a large class.

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COMMUNICATIONS RECEIVED.—We have received a *Review* of Dr. Stewart's paper, published in the Second Number of the Lancet, but from various considerations we must decline its publication. It is entirely too *personal* in its character for the pages of a scientific journal; and if published we would expect a reply from Dr. S., and this would call forth a rejoinder from the author of the review, and thus we would become accessory to an angry discussion, which we respectfully decline.

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CONVENTION OF PROFESSIONAL DENTISTS.—We insert the following proceedings of the Convention of Dentists, for the purpose of placing in the possession of our readers, a knowledge of progress making in this branch of the healing art. The proceedings were conducted with spirit, and unanimity. A constitution and By-Laws were adopted for the government of the Society.

PROCEEDINGS.

In compliance with a call from the CINCINNATI ASSOCIATION OF SURGEON DENTISTS, in connection with other members of the profession in the West, a Convention of Professional Dentists met in Cincinnati, on Tuesday, the 13th of

August, 1844, at 11 o'clock, A. M., in the lecture room of the Medical College of Ohio.

Dr. James Taylor, of Cincinnati, announced the object of the meeting by reading the circular of invitation.

On motion of Dr. M. Rogers, Dr. Joseph Taylor of Maysville, Ky., was called to the chair, and William B. Ross of Newport, Ky., was chosen Secretary.

The following gentlemen were present, viz:—

JOSEPH TAYLOR,.....*Maysville, Ky.*
J. P. ULLERY,.....*Lawrenceburg, Ia.*
A. D. BIGELOW,.....*Newark, Ohio.*
JAMES CLARK,.....*Lebanon,* "
D. P. HUNT,.....*Indianapolis, Ia.*
G. D. TETER,.....*Ripley, Ohio.*
D. B. WHEELER,.....*Xenia,* "
WM. B. ROSS,.....*Newport, Ky.*
F. E. SUIRE,.....*Madison, Ia.*
J. W. COOK,.....*Cincinnati, Ohio.*
P. KNOWLTON,..... " "
A. BERRY, .....*Raymond, Miss.*
J. B. ROSS,.....*Philadelphia, Pa.*
M. ROGERS,.....*Cincinnati, Ohio.*
JOHN ALLEN,..... " "
H. CRANE, ..... " "
WM. M. HUNTER,..... " "
W. J. MADEIRA,..... " "
CHARLES BONSALL, ..... " "
JAMES TAYLOR, ..... " "

The following gentlemen were present by proxy.

H. THOMPSON,.....*Columbus, Ohio.*
W. BASHAW,.....*Dayton,* "
B. STRICKLAND,.....*Cleveland,* "
S. P. HULLIHEN,.....*Wheeling, Va.*
W. H. GODDARD,.....*Louisville Ky.*
WM. R. WINTON,.....*Dayton Ia.*
B. B. BROWN,.....*St. Louis, Mo.*
W. E. IDE,.....*Zanesville, Ohio.*

On motion of Dr. M. Rogers,

*Resolved*, That it is now expedient to form a Society for the promotion of Dental Science.

On motion of Dr. J. Allen,

*Resolved*, That a committee of five be appointed to draft a Constitution for the organization of such a society.

Dr. James Taylor, moved that said committee be appointed by nomination, whereupon the following gentlemen were chosen, viz: Drs. Allen, Cook, Rogers, Bigelow and Hunt.

On motion, a committee of three were appointed by the chair, as a committee of arrangements. Drs. Teter, Bonsall and Crane, were appointed that committee.

The Convention adjourned to meet at 3 o'clock, P. M., to hear an address from Dr. Rogers.

*Afternoon session: 3 o'clock, P. M.*

Convention met pursuant to adjournment, when according to previous arrangement, Dr. Rogers delivered the opening address.

On motion, the address of Dr. Rogers was received, to be placed on file, with the proceedings of the convention.

The minutes of the morning session were read and approved.

On motion of Dr. Taylor, the Convention requested the members present to communicate any thing of importance that may have occurred in their practice; also to offer remarks upon the address which had been read.

Several communications were then made, relating principally to the malpractice of filling teeth with mineral paste.

Adjourned to meet at 8 o'clock, P. M.

*Night session: 8 o'clock, P. M.*

The convention was called to order by the chairman.

The committee on the Constitution presented their report.

Adjourned to meet to-morrow morning at 8 o'clock.

*August 14th Wednesday morning 8 o'clock.*

Convention met and was called to order by the chairman. Minutes read and approved.

The following officers were then elected for the ensuing year, viz:—

PRESIDENT, JESSE W. COOK, *Cincinnati Ohio.*
1st. V. PRES., A. D. BIGELOW, *Newark, Ohio.*
2d " " JOSEPH TAYLOR, *Maysville, Ky.*
3d " " D. P. HUNT, *Indianopolis, Ia.*
REC. SEC'Y., W. B. ROSS, *Newport, Ky.*
COR. " JAMES TAYLOR, *Cincinnati, Ohio.*
EX. COM. { M. ROGERS, " "
JOHN ALLEN, " "
F. E. SUIRE, *Madison Ia.* }
TREASURER, CHARLES BONSALL, *Cincinnati, Ohio.*

The convention having terminated its business by the election of officers, for the Mississippi Valley association of Dental Surgeons, the society was organized by the president elect, Dr. Jesse W. Cook being conducted to the chair by the presiding officer of the convention and Dr. W. B. Ross, assuming his duties as secretary.

On motion of Dr. Bonsall a committee of five was appointed by the chair to draft By-Laws for the government of the society to report at the next meeting. M. Rogers, James Taylor, A. Berry, P. Knowlton and John Allen, were appointed said committee.

After which an address was read before the society by Dr. James Taylor, upon Medico-Dental education.

On motion the address was accepted and ordered to be filed among the archives of the society.

On motion Dr. Wm. B. Diver of Cincinnati, was elected an honorary member of this society.

On motion a vote of thanks was tendered the officers of the convention for the faithful and impartial performance of their duties.

Adjourned to meet at 8 o'clock, P. M.

On motion, Professor M. B. Wright of the Medical College of Ohio, Professor L. M. Lawson of the Transylvania University, and Professor C. A. Harris of the Dental College of Baltimore, were elected honorary members of this society.

On motion,

*Resolved*, That the society now suspend its proceedings to hear an address from Dr. J. Allen of Cincinnati.

Dr. Allen then read an address upon the history of dental science, which was on motion, accepted to be placed on file among the archives of the society.

On motion, Drs. Cook, Rogers and James Taylor were elected a publishing committee.

On motion, Dr. Cook was appointed to deliver the opening address at the next annual meeting.

On motion, Dr. Harris of Baltimore, Dr. Brown of St. Louis, Dr. Ide of Zanesville, Drs. Taylor and Rogers of Cincinnati, and Dr. Goddard of Louisville, were appointed to deliver addresses at the next annual meeting of this society.

On motion,

*Resolved*, That a committee of three be appointed as a board of Censors, to decide on the publication of the papers read to the convention and society. J. W. Cook, Charles Bonsall, W. B. Ross, were appointed that committee.

The committee of arrangements, made a report, which was accepted.

On motion of Dr. Cook,

*Resolved*, That the Corresponding Secretary, be and he is hereby instructed to give public notice, at least two months prior to the next meeting of the Dental Society now formed, in the newspapers having the greatest circulation in the West, and in the Western Lancet and Dental Journal.

On motion of Dr. James Taylor,

*Resolved*, That we consider the use of all mineral or other paste in the plugging of teeth, as unprofessional and highly injurious, and that we will neither use it nor countenance its use by others.

*Resolved*, That we present to the board of Trustees and the Faculty of the Medical College of Ohio, our sincere thanks for their very kind civility in tendering the use of their spacious and commodious rooms, for the accommodation of this convention.

On motion of Dr. Allen,

*Resolved*, That we now adjourn to meet in the Medical College of Ohio, on the third Tuesday in August, 1845, at 11 o'clock, A. M.

JESSE W. COOK, *President*.

Wm. B. Ross, *Secretary*.

THE

# WESTERN LANCET.

VOL. III. CINCINNATI, NOVEMBER, 1844. No. 7.

## PATHOLOGY AND PRACTICAL MEDICINE.

ART. 1.—*On the Symptoms, Diagnosis, Pathology, and Treatment of Epidemic Yellow Fever, as it appeared in Rodney*, 1843. BY CHAS. B. NEW, M. D., *of Jefferson county, Mississippi.*

It was my desire to have preceded this article with one upon the "Topography of Rodney–the history of the epidemic, and its causes;" and under the latter head to have introduced the subject of contagion; as this now, is a matter of much public interest: but for the want of a correct map, exhibiting the situation of Rodney, I shall defer these subjects, for the next number of this Journal; hoping by that time, through the politeness of Mr. Murray, who is now engaged in taking a sketch of Rodney, I shall be able to present the subject in a more satisfactory manner.

At present I propose to describe the *symptoms* of the fever of Rodney and point out some of its *diagnostic* features—suggest some views upon its *pathology*; the result of observation at the bed side, connected with experiments and *post obit* examinations, made by eminent practitioners; and conclude with an account of the treatment found most successful during the epidemic.

*Symptoms.*—A remarkable uniformity was observed in the manner which the disease developed itself. Invariably a chill ushered in the attack—pain in the head and back always accompanied the rigor and in some cases preceded it for several days: though many who suffered from the pain in the back, escaped the fever, while those who were attacked with chills were at once regarded, and properly too, as the legitimate subjects of yellow fever. The rigor lasted usually about thirty minutes—the patient suffering from seeming great cold; but this was the result of *morbid sensation*, as the skin to the touch, evinced

no preternatural reduction of temperature—the pulse now soft, and frequent, and lessened in volume—the tongue coated with white fur.—When the severity of the rigor passes off, the patient is sometimes left with cold extremities—chilly sensations, creeping up the spine—sighing, gaping and with increased pains of the head and back—these symptoms did not, however, last long, reaction in all cases was quickly established. I saw no cases bearing any analogy to those described by Dr. Cartwright, in his treatise on the fever of Natchez, 1823; exhibiting as he frequently found at this period of the fever, and later, the "ataxic condition." The sensations of cold referred to, now alternates with rapid *flashes* of heat; generally commencing low in the back, extending up the spinal column, and suffusing the head, and face—the heat soon now predominates, and arterial excitement becomes general.

The patient is now restless—throws off the covering which the recent chill rendered necessary; and calls for water; the pains previously complained of, become almost intolerable, and often extending to the extremities; causing the patient to exclaim that "every bone in his body seems broken."—In some cases might be observed, a slight coolness of the feet, for six hours after the attack, while the heat about the head and breast, was very much increased. The pulse is now full and frequent, calibre enlarged, and still soft—the eyes now become red, the tongue at this period exhibits no evidences of derangement in the mucous membranes—if any change is perceptible in this organ, it is perhaps a little whitened and enlarged, or broader—no intumescence of any of the abdominal organs, or tenderness discoverable upon pressure, the urine natural—the bowels evincing great susceptibility to the action of cathartics: the skin, after a continuance of high excitement for twelve hours, in some cases, became slightly moist; such cases ended favorably when assisted by proper remedies—inducing free perspiration with which the fever would gradually abate, leaving the patient well in twenty-four hours.

In cases of fatal termination, this condition of the skin lasted but a short time; giving place to increased heat, violent vascular excitement, and dry skin. The pulse more resisting, sometimes corded and rotary—volume unusually large. The whole force of the circulation directed against the brain—the carotids throb violently, the patient anxious, eyes deeply injected, headache, intolerance of light, and delirium; all mark this stage of the disease. Near this period, the stomach become irritable—throwing off all fluids with little effort. Some pain and anxiety is experienced about the præcordia, and violent throbbing of the aorta, may now be observed.

This remarkable feature in the disease, was in no case that I witnessed, absent:—it was so great in some instances as to catch the attention of the bystander at some distance from the bed. It was always synchronous with the pulsations of the heart; and often displayed a power even greater than that organ. In some instances, a dry *tongue* was observed, in others, furred and cracked in the middle, with red edges. The *skin* harsh and dry—the secretion of the *liver* and *kidneys suppressed.*—About the third or fourth day, a slight yellowness of the skin, generally appearing first in the eyes, then about the *ala nasi*, and upon the breast, was seen—this, however, was not invariably present. In some cases the yellowness of the skin was not discoverable till within a few hours before death—in others not till after death.

Now at this period of the disease the vascular excitement will begin gradually to *abate*—the heat of the skin becomes less—the pulse grow smaller, softer and more frequent, and soon upon this condition, follows jactitation, delirium, and singultus. But in many cases the pulse would resume its natural regularity—beating most tranquilly, and apparantly to time of "healthful music"—the eyes would become dull and wear the expression of one intoxicated—the patient now calm or indifferent to his fate, though generally resting secure in the vain hope of recovery. In this respite from the more violent symptoms of the disease, though soon destined for eternity, all would alike answer, when asked how they felt? "they were better, only weak!" This condition I will call the *stage* of exhaustion, which was invariably present, both in mild and the more aggravated forms. This seeming improvement is only a deceitful calm, which is usuly disturbed by the sudden appearance of that fearful harbinger of death, the black vomit. After this symptom occurred the powers of life would rapidly sink, and generally in a comatose condition within twenty-four hours, the patient would quietly fall into the sleep of death. It may not be amiss to remark here, that up to the period of exhaustion, the lungs, in most cases did not seem to suffer—the breathing all the while regular, easy, and unembarassed.

When the stage of exhaustion approached in the milder form of the fever, or more properly speaking, in those that recover—the febrile excitement ends in a quiet sleep, the skin becomes moist—the pulse is soft, regular, though frequent, head free from pain, eyes less injected—alvine discharges bilious, urine free, sometimes dark—the patient now only complains of weakness, and pain in the back, which continues even after he leaves his bed.

There is no abatement in the arterial excitement, though at an early period there is observed sometimes a moist state of the skin, through

the entire progress of the case, till the approach of the stage of exhaustion, when the force of the circulation somewhat moderates, but never terminates, only in death or convalescence. The first suddenly announced by the black vomit, while the latter is brought about by the prompt and timely administration of proper remedies.

There were some few cases which terminated favorably within twenty four hours; others that ended finally in health, after a tedious illness; singularly too, evincing little or no functional lesion, with an entire absence of all structural derangement. And, again, others that resulted in death, from a simple *exhaustion of sensorial and nervous influence*, with a normal condition of all the secreting functions. To these I will allude hereafter.

The above is a "plain, unvarnished" history of the symptoms of the fever at Rodney, in its mild, and more aggravated forms. Many cases occurred with peculiar complications, modified, perhaps, by treatment differing somewhat from the general character of the fever; but, in the main, I am sure, the disease, as it appeared in the majority of cases, is correctly portrayed.

*Diagnosis.*—I had always regarded the views of Dr. Rush in relation to the nature of yellow fever, as correct. With him I had thought the fever in question, was only an aggravated form of bilious remitting fever. The fever of which he wrote certainly differed widely from that which we have just witnessed in Rodney, or he was deceived in its pathology. It is not improbable, indeed, we are in possession of sufficient facts, to warrant the opinion that yellow fever has, within the last twenty years, changed its general features. Be this as it may, I am convinced of this fact, that the yellow fever of Rodney differs in many essential points, from bilious remittent fever. Though closely allied to this class of disease, by the similitude in their origin, by the frequent change of types, often assuming each others character, during an epidemic, and by their having often certain symptoms in common with each other. Notwithstanding these evidences of kindred relationship, they are essentially different in nature, and requiring very different treatment. The most important distinguishing features I shall now point out.

It is truly stated by Dr. Bartlett, that this is a fever of one paroxysm, which as I have before remarked, only ends in death or convalescence.—The difference in this respect is plain to every practitioner. The difference can be made manifest, by reference to the predominant symptoms, and *post obit* examinations in each form of fever. The lungs, in yellow fever, seems free from disease, the breathing easy and natural; in bilious remittent fever, these organs are greatly involved, the breathing irregular,

oppressed and embarrassed. In yellow fever, the chylopopetic viscera are during the first stages of the disease, in most cases, free from derangement, either organic or functional; but, in the subsequent progress of this fever the secretions of these organs become suspended; while in bilious remittent fever, they bear the *onus* of the disease, the liver, particularly, becoming greatly disordered; its secretions redundant and vitiated. Calomel in the latter, is useful in correcting the lesion of secretion, which follows in all cases; while in the former this remedy cannot force the liver, when its functions are suspended, to resume again their healthy action. Moreover, derangement of the functions of the liver is by no means uniformly present in yellow fever; on the contrary, this organ in many cases, seems in full possession of its functional and structural integrity.

The mean temperature of the skin, is greater in bilious remittent fever; nor does the icteric appearance of the skin which at some period or other, never fails to present itself in yellow fever, scarcely ever occur in the former. The pulse is larger, and in the latter stages of the disease slower than in bilious remittent fever—the discharges from the bowels are first watery in yellow fever, after which, torpor of the intestinal tube follows, when great difficulty is experienced, in effecting any biliary action; while in bilious remittent fever, there is usually much irritation of the mucous membrane of the bowels, with frequent mucous and bilious discharges accompanied with tenesmus. Nothing approaching the nature of the fluid thrown up in the black vomit, have I ever seen, in any other form of disease.

Death in bilious remittent fever is brought about by organic lesions—yellow fever when complicated with any structural disease, which is very seldom the case, is much less likely to prove fatal.

*Post Mortem* examinations reveal to the eye of the Anatomist the correctness of the above diagnostic signs; exhibiting differences in the morbid appearances as great as those detailed in the symptoms. The *Stomach* is in most subjects free from all evidence of disease; though this organ together with the smaller intestines, may sometimes betray, as all other forms of fever, some traces of inflammation; but this is only the *result* of deragement in the functions of innervation, forming no feature in the pathology of the disease. It was remarked by Gillkrest, as a singular fact, that the ulcerations of the intestines which are so common in typhus, and almost every other form of fever, were never observed in the yellow fever of Gibralter. These ulcerations occur in other forms of fever, in the *ileum*, near that part occupied by the glands of Peyer. Nothing remarkable is found in the large intestines.

*The Liver*, when examined will show a greater exemption from disease than can be supposed by those who regard this fever as bilious remittent fever. This organ presents no evidence of any alteration of structure, and after the most careful researches in the anatomical labors of Bancroft, Chevier, Louis, Bone, Ferguson, Gillkrest and Cartwright; no one can, however eager he may be to place the pathology of yellow fever in this viscus, detect any evidence of organic lesion. All that they describe is an anæmic condition of the organ, a discoloration of its surface, and a contraction of the gall-bladder, from the absence of bile. In bilious remittent fever, the liver is often found indurated or enlarged, filled with venous blood, with blackened surface—sometimes so softened as to fall to pieces in raising it upon the hand, at others, its parenchyma filled with pus, or sanies—water within the capsules, and adhesions to the adjacent parts; together with other signs of a high degree of *inflammation*, not unusual—The gall-bladder enlarged and filled with inspisated black bile.

The *Spleen* in yellow fever is generally natural. In bilious remittent fever, softened, enlarged, and of dark appearance. The Kidney, presents nothing remarkable in either disease. The *Bladder* in yellow fever is sometimes contracted.

Now it is a fair deduction from facts, that no lesions of the abdominal viscera can be traced sufficient to account for death in yellow fever. The changes in the liver are as great as any observed in other organs in this disease; and yet they are not equal in degree to those found in bilious remittent fever; which notwithstanding these greater morbid changes is not by fifty per cent. so fatal, as the former disease.

*The Chest.*—The *Lungs* present nothing remarkable save now and then, as noticed by the "French Medical Commission," and others, circular patches resembling in color the spleen. In bilious fever, these organs are often the seat of most violent organic disease. The *heart*, as observed by Gillkrest, and other British Surgeons, in the epidemic of Gibralter in 1828, was very often the seat of great structural derangement. The discoveries of these gentlemen deserve, in a pathological point of view, the careful attention of the profession. "A change of color, a softening, and friable texture of the heart; together with false polype, were observed in very many cases." The latter appearances were also detected by Dr. Cartwright, in 1823, such evidences of structural disease, I believe are never seen in any other form of idiopathic fever. In bilious remittent fever no changes are noticed; in typhus sometimes flaccidity, and softening of the heart, are detected; but in no other form do such remarkable morbid conditions present themselves as the above.

In the *brain*, congestions, vascularity of membranes and sometimes water in the ventricles, are noticed—these doubtless, are often the result of inflammation, and they are no less frequently, I presume, the result of cadaveric changes. These changes are not more common in one form of fever than in the other.

*The Spine.*—The 'French Medical Commission' to Barcelona, supposed the spine the "*fous et origo mali.*" But their morbid appearances were the same as noticed above, in the brain, and are alike uncertain in their origin.

I will notice one morbid appearance, which may be valuable, not so much in establishing the fact, that such changes are not seen in other forms of fever, but on account of the following inference, *i. e.* that we do not properly estimate in our considerations of pathology of disease, the influence exerted by the fluids upon the animal economy. During the Gibralter epidemic 1828, "an infiltration, was noticed, of venous blood in the most uniform manner possible, into the cellular tissue of the minutest fibres of muscles. The whole substance of the muscles which appeared almost *black*, seemed one soft mass, which yielded to pressure between the fingers, as readily as the spleen." In some instances this appearance was confined to one leg and thigh—in others the infiltration extended to one half the body, the diaphragm exhibiting the line of demarkation. These changes must be owing to *diseased fluids*, hastening on the putrefactive process. It is not uncommon to hear of cases turning soon after death, very black, the incipient stage of decomposition taking place even before this period in such. This was noticed in the corpse of Mr. J. Lawton—and it is a matter of regret that the body of Mr. H. Logan was not examined with the scalpel, as I am informed by his father, Mr. W. Logan, that the one half of his body only, was very black, having become so before death. It is scarcely necessarry to remark that such appearances are seldom met with, in any other form of fever.

The above facts I think are sufficient to establish the position set out with, that there is an important distinction to be made, in the pathology of yellow fever, and that of bilious remittent fever. It is very true one not familiar with the disease, who should see a case of yellow fever but for once in any stage of the paroxysm, except the closing scene, would pronounce the case bilious remittent fever. But no one can confound the two after having observed a case of yellow fever, through every stage of its progression, from the incipient chill, to the fatal black vomit.

Apart from the consideration of some facts which led many to believe

in the identity of these forms of fever, the general character of fever, alone, would render them to the casual observer somewhat analogous. All constitutional disturbance of a febrile nature affects the same systems and organs though not in the same manner in every instance; some organs or systems are affected more deeply in one form of fever than another; yet all are more or less involved in general derangement, during *fever*, from any cause; hence all fevers, must bear to each other, some strong marks of resemblance—still there are shades of difference, the experienced eye can readily detect; differences, produced by the predominance of particular organs or system in the chain of diseased action. The relative derangement of these organs, tissues or systems often determine, the peculiar nature of the fever, and consequently its characteristic appellation; as Hectic, Typhoid, Synochus, Intermittent, Bilious Remittent and Yellow fever. The general phenomena in all these forms of fever are alike; yet each form has its distinctive feature; marking its identity, and directing the practitioner to a difference in treatment. I think it may be admitted that yellow fever, though resembling, as we have shown, bilious remitting fever, does not belong to this class; but is essentially another disease, distinct and separate in its nature from all others.

*Pathology.* The first impression of the remote cause of yellow fever is beyond doubt made upon the *nervous system.* Whether upon the brain or spinal column, or the ganglionic system as was suggested by Gillkrest and afterwards by Cartwright, it will be difficult to determine, but I incline to the opinion that the brain and spine, are first to receive the noxious agent. A similar view was first, I believe, suggested by Hoffman, extended and improved by Cullen, advocated by Brown, and since adopted by the majority of medical writers. Macculloch has been more fortunate than others, in carrying out the system—in erecting a more finished superstructure, upon the foundation, laid by Hoffman.

I will endeavor to illustrate this view of the subject by the case of my lamented friend, Dr. Savage. On the night of the 28th of September, the Dr. arose from bed, and made his customary professional rounds, and whilst engaged in this duty, he experienced an imperfectly developed chill; upon returning to bed again he was restless and passed the night badly. 29th. This morning some headache and fever, notwithstanding he got up, visited again his patients, and prescribed for them; returned home with increased fever, and again went to bed. He now took an emetic of tartarised antimony, which was soon followed by a warm bath. The combined effects of the remedial agents prostrated him. In this situation I found him soon after: a diffusive stimulant was given, under

which he soon rallied; followed by fever of moderate excitement; ten grains of calomel was now given. Afternoon, pulse 90; skin rather too warm; tongue clean; bowels moved from the calomel: the discharges natural; he now sits up in bed reading and conversing with ease. 30th. passed the night without sleep; fever continues; pulse about the same; no pain in the head or back; alvine excretions natural; skin moist: tongue but slightly furred. The symptoms now seemed so favorable and no particular indication presenting itself, I recommended nothing, feeling assured there could be no danger, when there is no evidence of any functional derangement. In the afternoon I returned to see him again; he had taken during my absence another dose of calomel, which had an unfavorable effect, bringing away free watery evacuations. This, however, was soon checked, and the bowels again resumed their normal action. 1st Oct. This morning I found him more comfortable, having spent the night pleasantly; still fever; pulse 90, soft and regular; eyes little red, and lachrymose; continues to sit up in bed, read and converse with animation. He now continued in this situation till the 4th, when I perceived there was a slight abatement in the fever; the pulse about 80, soft and of smaller caliber; skin moist; secretory organs performing their functions healthfully. Tonics were now suggested, but fearing the use of quinine, he preferred taking five grains of calomel, and one of opium. I did not insist on the quinine, but consented to his own prescription; believing still there could be no danger. 5th. 2 o'clock, this morning, I was called from the country, where I had gone to see my family, some of whom were very sick; I now found with ineffable horror my friend sinking rapidly, attended with those fearful harbingers of death, singultus and black vomit. I have not been particular in giving the treatment in this case; my object was only to notice the progress of the symptoms, and allude to the general course pursued. The patient was visited by all his professional brethren, and all at different periods of the case prescribed; and all who saw him, wondered that the fever should continue as it did in this case, without any apparent cause.

Now, what is most remarkable in this case, is, the absence of all organic or functional derangement. On the evening previous to the appearance of black vomit, he had a consistent bilious evacuation; a soft skin; pulse but little accelerated; and no pain, uneasiness, or tenderness in the region of the chylopoietic organs. His fever continued without abatement, intermission or remission, till the 5th day, when the stage of exhaustion came on. From this time his strength failed; and he passed away like a lamp burning itself out. This case shows, not only where the morbid impression was made, but moreover the nature of that

impression, that it was a stimulant; that it increased the sensorial and nervous powers, till they were finally exhausted. It proves also that the disease in this case spent its entire force upon the nervous and vascular systems, without involving any other organs, or systems, or tissues.

I will now notice another case, though differing in character from that just alluded to; it is equally important in showing the seat of the first impression, and the nature of the agent in producing it. James M. Berry was attacked on the 8th of October, in the usual manner, with chill accompanied by great pain in the back; this was soon followed by a violent reaction; the eyes quickly becoming deeply injected, and painful upon exposure to the light; carotids pulsating with unusual vigor; pulse large, firm, corded and bounding. His attendant fearing he would not bear depletion, gave him quinine and blue mass, alternately, with the digitalis mixture; this brought on perspiration, in 3 or 4 hours: but did not last long; the fever continuing all night. Morning of the 9th, fever stlll high, secretions *suppressed*, and no action from the bowels, or very slight, very improperly, now was given him brandy; fever still violent: delirium, stupor, and clonic spasms of the extremities, followed in quick succession: and he died comatose the next morning the the 10th.

The symptoms denote very great irritability of the heart and arteries, which is present in all cases; as will be further proven by reference to the treatment. In the more aggravated forms of this fever, this morbid irritability is doubtless changed into structural derangement, which may be seen on reference to the post obit examination, as noticed above.

The case of Dr. Hulse is valuable, and highly interesting; and one in point. This case resembles Dr. Savage's, in the absence of any material functional lesion; they differ, however, in this: the latter, displayed greater disease in the nervous and sensorial powers; whilst the former showed greater *irritability* of the *heart* and *arteries*,

Dr. H. was attacked in the usual manner, with chill; this, however, was of short duration, and quickly followed by great vascular excitement during the first twenty-four hours: nothing remarkable presented itself, save a greater susceptibility to the action of cathartics. This, perhaps, was produced by castor oil, which he took in the commencement, leaving the bowels in an irritable condition; free and copious watery purging was the result. In order to correct this, I thought very small doses of calomel with Dover powder would be of service; several powders were prepared, and one of them given—consisting of three grains of the former and two grains of the latter. He took but one before free watery catharsis, was again induced, prostrating him very much. This soon

gave way to a diffusive stimulant, and afterwards by the use of blue mass the excretion from the bowels, were kept during a tedious and dangerous illness, in a perfectly normal condition. Loss of sleep, restlessness, anxiety of mind, and arterial excitement now were all that were apparent; no pain in the head; no redness of the eyes; nor yellowness of the skin; indeed during the whole progress of the case, there was no evidence of any disease, organic or functional, save high vascular action, which to our surprise continued for eight days, with very little variation, notwitnstanding the favorable condition of the secretions. Another most remarkable feature in this case, was the extraordinary and almost convulsive throbbing of the aorta.

During the first four or five days his general strength did not fail him greatly—on the 5th day I think, notwithstanding, at the time there was great heat and dryness of skin; fullness, tenseness, and frequency of pulse; he was able to raise up in the bed and shave himself. But as the sensorial and nervous powers became exhausted, the physical powers gave way, and his strength gradually waned till about the 8th October. At this period, his medical attendants were unable to account for the continuance of the fever, and being myself alarmed at the now perceptible wasting of the powers of life, and having already become satisfied of the inutility of all our previous efforts, to reduce arterial action; I now, at the suggestion of my friend Dr. Todd of Rodney, and Dr. Benbrook from Natchez, waived my objections to the use of quinine. He was now put upon the use of this tonic, and I was agreeably surprised, in witnessing the prompt and happy result. I had never used quinine in active arterial excitement; not being able to reconcile my views of the nature of fever, with what I regarded the modus operandi of this tonic. Like Southwood Smith, who was unable to separate fever from inflammation; though he makes the attempt, only to confound them—I could not imagine the existence of an aggravated form of continued fever independent of functional, or organic lesion of some one or other of the great vital organs. Such conditions I deemed contraindicating tonics; and I still believe, when either of the above morbid conditions exist, that quinine is inadmissible. I was not mistaken in the virtues of quinine, but I was deceived in relation to the nature of fever.

I now think fever can exist when there is a perfectly normal state of the secretory organs; as the above case and that of Dr. Savage will clearly prove. To return to our case. It was not long after the first dose of quinine, 1 gr., before I observed the pulse to lessen in frequency, and on repeating it for several hours, and giving also the Digitalis, we were fortunate in removing the fever entirely.

Organic lesions do occur sometimes, but they form no part of the pathology of this disease, that is, there are none that are invarably present, or that contribute in determining the nature of the disease: but they are accidental complications, sometimes the results of idiosyncrasy, habits, predisposition of certain organs, or modifications produced by treatment. When organic derangement takes place, and the brain, the spine, or the heart, are not the seat, a favorable prognosis may be formed, for when any of the abdominal viscera bear the force of the disease the more vital organs, by a well known law of the animal economy, are exempt. This fact may be exemplified by the case of Dr. Williams.—This gentleman was attacked in the usual manner; all the fearful symptoms which characterize yellow fever during the first stages of the disease were present, pain in the head, injected eyes, irritable stomach, jactitation, with high arterial excitement, pulse unusually large, firm, and corded. Those symptoms continuing for three or four days, after which occurred inflammation of the kidneys of a most violent character, upon the appearance of this complication the disease assumed a new form, resembling more than yellow fever a severe synocha; indeed yellow fever was merged into violent inflammatory fever—he suffered much from this new complaint—pain in the lumber region and along the course of the uretas intolerable, discharging per urethra for several days a *dark dissolved blood* instead of urine. This affection gradually gave way to the usual treatment, when his recovery was complete. The fortunate result in this case may be fairly attributable to the accidental ocurrence of inflammation. I say accidental, for the reason that inflammations are by no means common; and inflammation of the kidneys less so than of other organs.

This was the only case that I now remember, that exhibited any evidence of inflammation of the abdominal organs. Mr. Wood died of sub-acute inflammation of the brain. H. Logan of phrenitis, and J. Berry of inflammation of the brain and spinal column.

Inflammation cannot be regarded as an essential feature in the pathology of yellow fever, and when its presence is manifest, we are not to look upon it as the cause of fever, but as one of its results. In very few instances was the existence of inflammation suspected in any of the organs, and when this condition did occur, whether in the brain, spinal, cord, heart, or any where else it was the result of reflex action, and not primary affection. Evidence of this may be found in the fact, that yellow fever often kills instantaneously: inflammation is a process which passes through several stages before it can destroy life, and never does destroy life suddenly even when it attacks the more vital organs. Again,

the absence of all structural derangement in *post mortem* examination of subjects of yellow fever, the sudden manner of death, and the great fatality attending the disease, all attest the correctness of the position taken, i. e., that inflammation occuring in yellow fever is but an accidental complication and forms no part of the nature of the disease.

I shall now close this part of my subject with a brief recapitulation of the morbid events, noticed in the fever of Rodney.

*First.*—The febrile poison is received by the nervous system, and upon which the full force of the disease is often expended, as seen in the cases of sudden death, and those who seem to die from a *wasting* of the sensorial and nervous powers; without involving any other system in the derangement.

*Second.*—The *vascular system* becomes involved, and in the general disturbance of the circulation which follows, any organ of the body is liable to receive its undue and misdirected force, producing structural derangement, but this is of rare occurrence.

*Third.*—The suppression or derangement of secretion, the first a consequence of morbid condition of the blood; the second, the result of disturbance in the vascular system.

*Fourth.*—A morbid condition of the blood; which may be produced by direct nervous influence, or by impaired powers in the secreting organs.

I have now described the fever of Rodney; pointed out the diagnostic features of this, and bilious remittent fevers, remarked the absence of the structural disease in the chylopoietic organs; noticed the morbid phenomena of the fever as they appeared to the writer: and the causes which operate sometimes in determining the peculiar nature of individual cases. These considerations should direct us in the adoption of proper remedial measures. We should be careful not to suffer a blind adherance to any particular indication, or a love of any favorite theory mislead our judgments, to the exclusion of the consideration of the actual condition of the system. But rather let us explore the whole field of morbid derangement, and concentrate our remedial efforts towards the relief of such systems, or organs, as seem most deeply implicated, and most deserving our special interference. By keeping constantly and strictly in view the above objects, the judgment of the physician must be better able to discern the bearing and scope of the varying symptoms of each case submitted to his care; and his curative plan based on correct principles, must be such as science approves and the moral responsibilities of the profession demand.

*Treatment.* Before entering upon a detail of the practice found most

suffering with the chill, an emetic of Tartarised Antimony was I believe in most instances, when the case resulted favorably, used. I believe when they were given promptly, and in the chill, they prevented suspension of secretion; which was observed in many cases, who were not treated in this manner. Few died, when the treatment was thus commenced, and a majority of those who recovered took the emetic. They seemed to shorten the chill, restore the equilibrium in the circulation, render the reaction more complete, and increase the susceptibility of the stomach to the influence of other remedies. Since the epidemic of Rodney, in reviewing the valuable essay of Dr. Cartwright, I find I am preceded as well as surpassed in my admiration of this remedy. He says, "in the first stages of yellow fever, or in that which consists in an ataxic or crippled reaction," when the blood is unequally determined, the heat unequally diffused, sensation impaired, and secretion suspended; I found no remedy or combination of remedies which produced such decided effects as Tartar emetic in full doses." He goes on to speak of the difficulty he found in producing an impression on the stomach, by the tartar—the necessity of repeating the dose 3 to 10 grs. every one, two and three hours. I saw no such insensibility of the stomach—one dose of 4 grs. given all at once, was sufficient in all cases; producing free and prompt emesis. The Dr. relied on this remedy principally, and seemed to attribute his success entirely to this, and the use of the lancet.

I never used the emetic in any other stage than the first, and I agree with Dr. C. that their use in any subsequent stage must be hazardous. Great caution should be observed in giving the emetic; care should be taken that its effect be not protracted too long—nor do I think they would be admissible in persons of delicate constitution, or those feeble from recent illness.

*Bath.*—When the emetic failed to diffuse the heat, and equalize the circulation, the next remedy in order most valuable as an auxiliary, was the *warm Mustard Bath.* After the operation of the emetic, if the feet remained cool, the patient suffered from a morbid sensibility, complaining alternately of heat and cold, he was placed in a bath. From ten to fifteen minutes were generally sufficient to remove morbid sensibility, restore the broken balance in the circulation and establish as well as moderate general excitement. The bath sometimes brought on a general perspiration, which however I believe never lasted any time. The foot bath was used with the view of inviting the circulation from the brain, and inducing moisture upon the skin; and in some instances with seeming good effect. But in all instances I believe the effect was only temporary.

*Cathartics.*—I think it important that the bowels in every case should be freely evacuated, as soon after *reaction* is established as possible; but after this period free purging is not desirable. By the early evacuation of the bowels, the ingesta which may prove a source of irritation in the course of the fever, are removed, and the bowels become more susceptible to the subsequent action of medicine: and torpor less likely to occur. After the faculty had become familiar with the disease, and consequently acquired some success in the treatment, a preference for particular purgatives became apparent. Each physician had his favorite, nor can I say that any very decided advantage can be claimed by either in this respect. *Blue Mass*, I think deserves the first place in the list, as it was most generally relied on, and less liable to objection than any other.

As a purgative I thought this remedy better adapted to the state of excitability of the stomach and bowels, than all others. It was given in doses of five grs. every hour, till the patient had taken 30 or 40 grains; at which time, if the bowels were not moved, oil or seidlitz powders sometimes, and in other instances injections were resorted to as auxiliaries. As a corrective of the secretions this remedy was in the latter periods of the epidemic depended on entirely; and I believe richly deserved the confidence of its advocates. But I must not omit to mention that some of the physicians preferred *Castor Oil* as a purgative, given after the manner of the physicians of New Orleans, commencing their treatment with it. I am informed by some, that they used the oil successfully in this manner. I did not observe its effect, but in one case, Dr. H., and that detered me from its use entirely. In the first of the attack in most cases as noticed above, there was great irritation of the bowels evinced by free watery purging. This tendency I thought prohibited the use of oil. In the subsequent stages of the disease, all agreed, I believe, in the use of the blue pill, aided by injections, in maintaining a soluble condition of the bowels, and in obtaining or correcting secretions.

*Blood-letting.*—Venesection was performed in some few cases with good effect, where in the early stages of the excitement, great injury threatened some one of the vital organs. In such cases, the pulse was full, firm, frequent and corded. In the case of Dr. Todd its effects were very manifest. It was also used in other cases, but with no marked beneficial effect. Upon the whole, blood-letting was not regarded as a necessary remedy in the treatment of the fever of Rodney, and only occasionally resorted to, to reduce undue vascular excitement, when threatening some one of the organs with structural lesion. *Cupping* was more frequently performed than venesection, and with more decided advantage. Topical bleeding from the temples, the whole length of the

spinal column and over the region of the abdominal viscera by means of cups was repeatedly tried, and in many instances with happy results. Dr. Picket, who was very partial to this mode of blood-letting, speaks highly of the value of this remedy. *Blisters* after cupping, were sometimes applied, and more frequently where topical blood-letting was not deemed necessary, and always with advantage.

*Digitalis.*—As an auxiliary to the lancet, in cases when this remedy was indicated, and in all others where bleeding was not required, the Digitalis in combination with Spirits Nitre Dulc., Autim: Vin. and Paregoric, was held in high estimation. To allay *morbid irritability of the heart*, and reduce the force of arterial action, direct the circulation to the surface, inducing free diaphoresis; this combination was invaluable, except in cases of great organic lesion. This remedy superceded the use of the lancet, and effected more during the exacerbation than all others.

For several years I have used the same combination, omitting the Paregoric, in treatment of bilious remitting, and intermitting fevers, with singular success. So entirely have I depended upon the Digitalis mixture, in the management of those fevers, that I have seldom resorted to the lancet. I have frequently been enabled by its use to break up a paroxysm in the midst of the stage, by producing free diaphoresis, and during the intermission thus brought about, by promptly giving quinine, I have seen the fever give way, without the recurrence of another paroxysm.

Observing in the case of Miss Sarah Watkins, 12 hours after attack, a slight abatement in the fever, I concluded to try this medicine, with the hope of converting the disease into a remittent, or intermittent fever. The digitalis was given in combination with spirits nitre, and I was delighted with the result. The remission was not sufficiently complete I thought, to warrant the use of quinine, but we had gained something, and I determined to persevere till we should effect a complete apyrexia. It was now given every hour during the exacerbation, and again with good effect; but fever still too high to admit the quinine. The same course was pursued in the third paroxysm and with increased advantage,—the fever going off this time, the quinine was ordered, and after taking for several days this tonic together with blue mass, where the state of the bowels required, she rapidly recovered. Some two or three days after witnessing the ffects described in this case, I met Dr. Benbrook, who had kindly come to the assistance of the faculty of Rodney. To my surprise, I found he was familiar with the use of Digitalis in the treatment of yellow fever, and prescribed it with great confidence in all cases, submitted to his care in Rodney. It was now used generally

in the treatment of the disease, by every Physician in Rodney; and certainly with evident good effects. I have no doubt that Digitalis mixture, omitting the paregoric, for I have always dreaded opium in any form, where there was any cerebral disturbance, is a valuable medicine in the treatment of all fevers; and its success in the treatment of the fever of Rodney, is additional proof of its importance.

*Quinine.*—This remedy was at the commencement of the fever given liberally, but with no satisfactory results; so fatal was the disease at first under every form of treatment, that the faculty lost confidence in this remedy, as well as all others; but after abandoning the calomel and opium, and again resorting to quinine, which they did, the results were very different, and I may now infer that the first want of success, was no fault of this remedy; besides, quinine was used during the most fatal periods of the epidemic, but given without calomel and opium in several cases, with very favorable results. The case of Proskee attended by Dr. Todd, is one in point. "This occurred when nearly every other case proved fatal. He was attacked in the usual manner; had high fever, pain in the back &c.—After free evacuation of the stomach and bowels, when upon taking about twenty grs. in course of 12 hours, his fever abated; and finally went off leaving him well in three days. Mrs. Wood, attended by Dr. Andrews, also Messrs. Harwood and Mitchell, attended by Dr. Hulse,—all recovering about the same period. In all, free evacuations were first obtained, when by the use of quinine a speedy convalescence was brought about. I think quinine, was highly useful in the treatment of the fever of Rodney, yet I do not think it could have been used with advantage indiscriminately in all cases. When there is no organic lesion, and the state of the circulation seems to threaten none, and an entire exemption from all cerebral disturbance, with a soft pulse and moist skin, I have no doubt, whether in the treatment of bilious or yellow fever, quinine would be advantageous. But when there is any organic lesion, or any determination to the brain, the pulse full, bounding, and tense; I should prefer reducing this violent action, by the lancet, if either of the conditions noticed were present; if not, by the use of the digitalis mixture, after which the free use of quinine becomes necessary.

The case of Berry before referred to, shows the impropriety of using quinine or stimulents in these conditions, and before free evacuation of the stomach and bowels is effected. He was put upon the use of quinine combined with blue mass, which failed to produce free action from the bowels—determination to the brain marked the first reaction—throbbing of the carotids—pain in the head and delirium soon followed: in

which state instead of guarding the brain from undue arterial excitement, the medical attendant, supposing the individual had been addicted to the too free use of spirits, and apprehending a failing of the powers of life, gave brandy—*coma* and convulsions followed—and death quickly closed the scene.

The case of Mandeville, treated by the writer, is valuble in illustrating the use of quinine and the manner of giving it. This case was attacked with chill, followed by great pain in the head, and back—reaction violent—threatening the brain. He was bled from the arm; blistered on the back of the neck—bowels freely evacuated—after which he was placed upon the use of the digitalis mixture, omitting the paregoric. This was continued in doses of a teaspoonfull, every hour for ten hours; when an abatement in the fever was brought about, evidenced by subsidence of arterial action; less pain in the head—soft pulse, and some moisture upon the skin. The quinine was now commenced, and given alternately with digitalis in doses of two grains every hour—under this treatment the fever gradually gave way, and left him convalescent in three days, from the attack.

*Carbonate of Ammonia.*—This remedy was used with supposed good affect in irritability of the stomach, which sometimes proved troublesome both in the early, and latter stages of the disease. It was also given in the stage of exhaustion as a diffusive stimulant, and sometimes as a diaphoretic, but never I believe with any marked advantage.

*Sugar of Lead.*—This I gave in some instances in black vomit; none recovered after this symptom, therefore I cannot say any very decided effect can be attributed to its use. I thought, however, combined with camphor, it relieved the patient of that most distressing symptom, singultus; and lessened the frequency of the vomiting. I have very often used the sugar of lead in combination with calomel, in the common fevers of the country, with the view of correcting watery discharges, which are sometimes very alarming, with fine effect. I gave it with this object, and with good effect, in one case during the late epidemic. It is not generally known, that this remedy may be given very liberally, without producing any other inconvenience than *salivation*. For my acquaintance with this medicine, I am indebted to Prof. Drake whose valuble remarks upon its use in Cholera, I have not yet forgotten.

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ART. 2.—*On Tubercles and Phthisis.* By JAMES BLACK, M. D.—Considerable difference of opinion still exists among pothologists as to the generation and development of tubercles, as found in the lungs—whether they are the physiological result of a low inflammation, or are a peculiar

deposit from the blood, formed by the aggregation of certain morbid or semi-organized molecules, or whether they are an abnormal growth, of the nature of hydatids. Their primary localization is also unsettled. Gerber considers these deposits may arise from any arrestment in the capillaries of the lungs, by which an exudation of the *plasma* or *liquor sanguinis* takes place through the parietes of the vessels into the parenchymal tissue, and so the tubercles are formed—thus making them a mere exudation of albumen, if not of fibrinous globules. Lugol considers their formation to be an *epigenesis*—organized matter capable of nutrition, similar to parasitical growths in other parts, such as in the case of hydatids, intestinal worms, and *pediculi*. All these parasitical complaints are held to be much more frequent in scrofulous habits than in others; and he denies that tubercles begin to soften first in the centre, but equally throughout—being previously quite homogeneous in their texture. As a proof that tubercles are endowed with vascularity, Lugol has met with two instances of hemorrhage in their interior; and, according to his latest opinions, tubercles are no more to be looked upon as devoid of blood-vessels, than the pleura or the white matter of the brain, when congestion or inflammation does not exist; but where vessels are easily detected by the naked eye in all of them, when these phenomena take place.* Dr. Kingston also argues for the vascularity of tubercles, and cites, as an analogous proof, the *supposed* non-vascularity of articular cartilage, which, he says, has now been proved to be supplied with blood vessels.† In this, he may be said to overlook the ready development of vessels in textures normally corpuscular, or only endowed with cellular permeability. In opposition to these views, many pathologists, especially in this country, consider tubercles to be composed of inorganized matter deposited from the blood on the mucous surface of the air-cells, and, not unfrequently, in the parenchyma of the lungs. It also follows, that as no change can originate in the organized matter itself, so the solidified tubercle can only be affected through the agency of the parts around, or in contact with it. These latter opinions are founded, principally, on the anatomical researches of Dr. Carswell; and Dr. Watson adopts them to their full extent, while he agrees with Lugol, that the formation of tubercles is closely linked with the scrofulous diathesis.‡ While the miliary tubercles are considered by Andral as the pulmonary vesicles rendered hard by chronic *inflammation*, others, fol-

*Lugol's Lectures, by M. M. Bennett and Guiet; Medical Gazette, Sept. 24, 1841.

† Medical Gazette, November 26, 1841.

‡ Lectures in Medical Gazette, vol. xxix.

lowing Dr. Carswell, continue to attribute them to a secretion from the blood, not of tubercular matter alone, but of also of a portion of its albuminous fluid, forming a transparent matrix or cyst for the more solid deposit. Dr. Watts seems to hold the modified view of tubercles being of an intermediate nature between pus and coagulable lymph, first solidifying, then softening.* That tubercles are the pure result of inflammation is now rarely entertained; but the more modern phraseology is, that they are the result of a perversion of the ordinary process of nutrition; and that the existence of the scrofulous diathesis occasions that to be deposited as inorganizable albumen, which, in a sound state, would have taken on the form of organized fibrine.† Dr. Campbell, moreover, in his late *Observations*, infers, with some French physiologists, that the pulmonary capillaries are of smaller dimensions in individuals of strumous habits, than in those of a healthy constitution. This is the predisposition which arrests the imperfectly organized globules in the lungs—a deposition therefore takes place in the pulmonary capillaries, followed in process of time by a reaction, explosive of the disease. M. Louis, in his admirable article on Phthisis, in the *Dictionnarie de Médeceine*, lately published, takes a review of all the theories existing on this subject, and considers objectionable that of tubercle being the result of inflammation, or of being nothing but concreted pus, having its seat in the venous capillaries, according to Cruveilhier and Lallemand. He considers the semi-transparent granulation or miliary tubercle as the first degree, or the nucleus which is developed into the crude tubercle; and, on the whole, he seems inclined to attribute some vascular organization to these bodies. The article is a most valuable one, and deserves translation into our language.

Notwithstanding the continued hopeless fatality of tubercular phthisis in general after all the progress that has lately been made into its *genesis* and the intimate analysis of its morbid products, still we may say, we are advancing in the more correct appreciation of those cases, in which a lamentable issue is to take place, through the means of our stethoscopic diagnosis. The more porfect knowledge of the predisponent causes and the incipient condition of the disease is, by degrees, leading us to a more scientific application of preventive measures, and especially, by correcting early aberrations in the nutritive organs. The use also of respirators and of artificial local atmospheres, as recommended by Mr. Jeffries,‡ if a timely removal to an appropriate climate cannot be

* Dublin Journal of Medical Science, March, 1842.
† Carpenter's Physiology, p. 497.
‡ Medical Gazette, vol. xxx.

accomplished, are also thought more worthy of attention. It would also appear from Liebig's late investigations, that a diminshed supply of oxygen from a warm and moist atmosphere would tend to diminish the amount and severity of pulmonic disease.* Mr. Gilbert in his lately published work,† while he considers, like several of his predecessors, the *fons et origo* of the disease to be owing to inorganizable matter being conveyed into the blood from a defective or perverted nutritive process, strongly insists on a judicious regime and diet in youth, especially where there is phthisical diathesis in the parents. To detect the earliest invasion of the disease, which is the most difficult point in our stethoscopic diagnosis, he recommends M. Fournet's very discriminative attention to the respiratory murmurs, and especially to those of expiration, which are increased both in duration and intensity, while the inspiratory murmur is increased only in intensity, but diminished in duration.

The occasional discovery of cicatrized cavities in the lungs, such as are related by M. Payan, of Hotel Dieu of Aix, and by Dr. Stokes and Graves, has moreover stimulated some to continue the use of empirical remedies, even in the advanced stages. Among these we have the *proto-iodide of iron* and the *ol. asphalti;* while, in the early periods, we have the pure alkalies highly recommended by Dr. Campbell,‡ and repeated emetics of *ipecacuanha* by Dr. Durant,§ after the old plan of Dr. Morton. We must not here forget the very elegant arsenical cigarrettoes, invented by M. Trousseau, which, in these days of *fumomania,* might be easily and effectually adopted, instead of glass inhalers or other stationary apparatus, which are seldom perfectly managed by delicate and nervous patients.

Some of our French brethren are not very sanguine, that the light of modern science will add much to the cure of phthisis; and M. Paris, Haute, Saone,‖ even says, that since the discovery of auscultation and percussion, the disease is in general more rapidly fatal. He attributes this to an early decided prognosis, whereby the patient is at once put upon a medicated diet, by which the blood becomes sooner impoverished; for he considers the very essence of the disease, to be a poverty of nutritious principles in the blood—that its character is chronic, and that its

* Liebig's Organic Chemistry of Physiology and Pathology, p. 23.

† Pulmonary Consumption; its Prevention and Cure, established on new views of the Pathology of the Disease, London, 1842.

‡ Op citato.

§ Medical Gazette, December 31, 1841.

‖ Bulletin Général Thérapeutique, September, 1841.

more irregular and rapid progress is owing to the employment of an antiphlogistic treatment, to a dietetic regimen, or to a milk and mucilaginous diet, producing an atony in the digestive organs, and also to the depression of the active moral sentiments. He also cities some cases where a generous diet and dissipation of time, with travelling, produced a cure or lengthened course of the complaint. I may here remark, that some late statistical inquiries have tended to stagger the popular, if not medical opinion, as to the greater prevalence of phthisis in some climates, and among some classes of people, who were thought very obnoxious to the disease. A writer of a very elaborate article in the *London Medical Gazette* has endeavored to show that, from statistical returns, "it is neither inequability of temperature, nor the frequency and magnitude of the variations in temperature to which a country may be subject, that has any effect in the production of phthisis;"¶ and Mr. Noble, before the statistical section of the last meeting of the British Association, has deduced some observations, in which some few others concurred, that the deaths from consumption, in the factory district of Manchester, were actually fewer in proportion to the deaths from all causes, than in the agricultucal county of Essex, being as four to twenty-one in Essex, and three to nineteen in Manchester; and finally, he showed that a smaller rate of mortality from this disease, compared with the number of deaths from other causes, existed in the Manchester district, than was to be found in the rural parts of the country.—[Amer. Jour. p. 446, from Retrospective Address, in Trans. of Prov. Med. Association.

## SURGERY AND OPHTHALMOLOGY.

Art. 3.—*Trephining in Injuries of the Head.*—Dr. Laurie and Dr. King, in a paper published in the *London and Edinburgh Medical Journal*, give the following rules for the operation of trephining in injuries of the head, when there are present profound coma, paralysis, and other symptoms of severe cerebral lesion, as the most rational, and best supported by experience. 1st. When the shock has passed off, and the patient is in a condition to bear the operation, we should operate where the state of the bone is such as would warrant interference in mild and less urgent cases. In other words, symptoms of severe compression should not prevent us from operating in those cases in which the state of the bone, irrespective of cerebral symptoms, seems to warrant the operation, although our hope of benefit from the operation is very slight.

¶ Medical Gazette, July 1, 1842.

In such cases, we ought not to expect that removal of depressed or comminuted bone will take with it the symptoms of compression; all we can look for is, that it will render the injury less complicated by removing an obvious source of irritation. 2dly. Where we have good grounds to suspect extravasation, we operate to give vent to the offending fluids; here, also, our hope of benefit from the trephine is very slight. 3dly. In all other cases of this class of injuries, they think it good surgery not to interfere, and it appears to them that nearly the same rules apply to those cases in which symptoms of concussion are united with compound fracture. If the state of the bone *per se* demand interference, we ought to operate, to take away a source of irritation, not in the hope of removing the symptoms of concussion. In all other cases complicated with concussion, we ought not to interfere. Dr. Laurie and Dr. King express their opinion strongly relatively to the use of the trephine; they say that it would not have been greatly to the disadvantage of the patients admitted into the Glasgow Infirmary if a trephine had never found its way within its walls. Like all other operations, however, it is too often tried as a forlorn hope in hopeless cases; and, in the more favorable, is delayed until the proper period for its performance has passed. They believe that there are not many cases in which it can do good; but, if these were but properly selected, and promptly and effectually operated on, statistics would show fewer operations, and not only relatively, but absolutely, more recoveries.—[N. Y. Med. Jour., from the London Med. Times, p. 269.

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Art. 4.—*Remove the whole of an Organ affected with malignant Diseases.*—If there be a scirrhous tumor imbedded in the gland of the breast, and you remove the tumor, together with the part of the breast in which it is situated, leaving the remainder of the breast, according to my experience, the disease is certain to return; and this corresponds to a rule which I think applies to all cases of malignant disease—that is, that you have no security against the return of the disease unless you remove the whole of the organ in which it is seated. For instance, if there be fungus hæmatodes of the bone of the leg, the patient may have some chance if you amputate the thigh above the knee, but none if you cut through the tibia below the knee. If there be malignant disease of the femur, you have very little chance at all, unless you think it expedient to take out the thigh-bone at the hip-joint. I say, therefore, in cases of scirrhous tumor of the breast, if you perform the operation at all, where the tumor is imbedded in the breast, you must remove the

whole of the organ. You may imagine that this is a thing very easy to be done, but you will not find it so in reality; for, in amputating the breast, in a thin person, you will be very apt, if you are not extremely careful, to leave a small slice of the gland of the breast adhering to the skin, and I have no doubt that this small portion may, in some cases, form the nidus of future diseases. The color of the gland of the breast varies little from that of the surrounding adeps, the hemorrhage causes confusion, and you must be careful, in the dissection, to keep the knife near the skin, not near the breast. But, in addition to this, in every case when you have taken out the tumor, you should examine the surface, and see whether every part you have removed is covered by healthy adeps. If it be not, look on the middle of the flap of the skin, and see whether any small portion of the breast has been allowed to remain there.—[Ibid. p. 269.

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Art. 5.—*Irregular and Decayed Teeth.*—Some times immense mischief arises from the irregular growth of the teeth, and patients have even lost their life in consequence of it. My friend, Mr. Nasmyth of Edinburgh, a most accomplish surgeon and dentist, who took the right way of studying his profession, having been for years a demonstrator of anatomy, met with the following case:—an old friend applied to him with an extensive abscess of the cheek and great swelling of the face and jaw, the abscess extending down to the clavicle. His mouth could not be opened, the inflammation locked the jaw, and the patient ultimately died. On a *postmortem* examination it was found that the cause of the whole mischief was the wisdom-tooth growing forward and lying horizontally instead of perpendicularly. This is a rare case, but it shows you that much mischief and serious consequences may arise from a trifling cause.

From the decay of the teeth you frequently find great mischief arising in the neighborhood. Many cases of ulcerated throat are caused by the presence of stumps, the affection being propagated along the lining membrane. The disease is kept up by, and cannot be removed till the causes are removed. Ulcerations about the lips and nose sometimes arise from disease about the incisors, or are kept up by it. I recollect the case of a gentleman who came from the West Indies to be treated for an ugly ulcerated tumor on the cheek. Very active measures had been adopted in the island where he resided. He had had the part cut out more than once, and corrosive agents applied in all sorts of ways. Recourse had been had more than once to the actual cautery. On the last occasion the surgeon had made him put a lime, a fruit like a small lemon, in the

cheek, to distend it, and make the disease more apparent, and then a red-hot skewer was thrust into the bottom of the wound. Still it did not heal, and he came here expecting to have some dreadful operation performed for the relief of his malady. The whole case depended on a decayed tooth in the upper jaw: it was taken out, and in a week he was well. He would have recovered at any period of the disease if that tooth had been attended to.—*Liston's Lectures.*

## MIDWIFERY.

ART. 6.—*On the mode and proper time for making examinations per vaginam, in cases of Labour; and on the Premature Rupture of the Membranes.* By CHARLES CLAY, *Member of the Royal College of Physicians.*

So simple do these questions appear at first sight, that one would fancy it next to impossible that contrary opinions should be expressed upon them; but such differences have existed, not only as to the mode, but also as to the time, when such investigations ought to take place, in order to secure the objects for which such enquiries are set on foot. The conducting of the investigation (simple as it is) is often the making or ruining of the prospects of a practitioner: females will not have their ideas of delicacy outraged twice by the same individual, if they can by any means avoid it. There is scarcely any point of the obstetric art that so soon detects the ability or ignorance of the party employed, as examinations per vaginam. The well informed accoucheur will conduct his enquiry with the greatest delicacy possible, and generally, at the first examination, will not only fully satisfy his own mind of the particulars of the case, but be fully prepared to meet the exigencies, whatever they may be, by prompt measures, and at the same time gain the confidence and respect, not only of the patient, but, of those in attendance, who are at all times alive to the conduct of the accoucheur, and whose eyes and ears are ever open to criticise; whilst no ill consequences ever arise from the investigations properly conducted. On the contrary, an ignorant practitioner is often indelicate in his proceedings, and his want of knowledge obliges him to make frequent examinations (where one ought to serve,) often leaving his mind as much in the dark as before, whilst the frequency of his attacks not only irritates the patient and her attendants, but seldom fails to be productive of more or less mischief to the parts concerned in parturition.

A knowledge of the part presenting, the state of the soft parts, and

the peculiar features of the pelvis, are circumstances of the highest importance at all times, for the accoucheur to be acquainted with, in his early connection with the case. It is true, that the vast number of natural and easy labours, in comparison with those where some difficulty presents itself, would lead to the supposition, at first glance of the subject, that vaginal examinations need not often be instituted; it is, however, the uncertainty that exists in all cases (even when preceded by frequent easy labours,) that renders such proceedings imperatively necessary.

As my object in these, brief remarks is, simply, with the *operation itself*, I will not enter into any lengthy arguments on the cause and results of such enquiries, but first direct attention to the mode, and afterwards the time, to be selected. The objects of such investigations are too manifest to dwell upon, since upon them depend all the future management of the case, however simple! however extraordinary!!

It is not usual to make examinations, until the process of labour has considerably advanced; but it can never do harm, and may be productive of much good, to have an early acquaintance with the case, and be timely prepared with means to contend against the difficulties that are likely to take place; otherwise, circumstances might suddenly occur, which, if the party did not possess a very ready presence of mind, would confound him no little. The most suitable mode for instituting an examination, is that under which the patient feels most comfortable, and the practitioner is enabled to pursue his object with the greatest facility; and that is, most undoubtedly, when the patient is lying on her left side, with her back close to the bedside, and her knees doubled up, and brought as near the chin as may be, the accoucheur sitting at the bedside with his *right hand* to the patient; and here I have to express my surprise, that some authors, even the most modern, advise (when the patient is in the above position) the use of the *left hand;* how this can be made more convenient than the right hand, I am quite at a loss to conceive. I maintain, there are other reasons why the right hand should be the operating hand, independently of the convenience which I think must be too manifest to admit of dispute; and yet the talented Blundell and Ramsbotham advocate the left hand. The other reasons are:—1st. cleanliness; for, if the left hand is made use of, the patient cannot be confined so neatly to the limits of the bed;—2d. the acuteness of touch is more prominent in the right hand;—and lastly, when strength is required, the right hand is decidedly to be preferred;—of course, *the last point has no reference to mere examinations.* To use the left hand, must be exceedingly awkward. I cannot deny, but that I have used it; but it was in consequence of an

accident, some years ago, rendering me incapable (for some weeks) of using the right hand. The position of lying on the left side is, I believe, pretty generally adhered to, nevertheless. It is the custom of some countries to adopt different usages: such as the recumbent, sedentary, and, it is said, in Ireland, on hand and knees, or what is vulgarly called, *all fours*. Indeed, in this country, there are yet some antiquated practitioners, who adopt very indecent positions for their patients. It is to be hoped, however, for the credit of the art, these are but few, as the practitioner must ever feel uncomfortable where indecency is practised, and if so, how much more must the females present (particularly the one exposed to such a fate) feel. Females themselves often have strange notions of the position they prefer for labour, and will frequently state their inability to go through it in any other way: absurdities which the practitioner cannot overcome without some little firmness. In instituting examinations, some have advised one, others two fingers; some the index, others the long, or what is commonly termed, the middle finger (that is counting the thumb as one.) I am, I confess, old fashioned enough to agree with Smellie, that one finger, and that the index finger is not only the best, but in every way capable (as far as the touch is capable) of accomplishing all we require to know. I am also disposed to agree with the same antiquated author, in maintaining that two fingers are not only inconvenient, but unnecessary, occupying more space than there is sometimes to spare, and often giving more pain than attends the exploration with one finger only. I question, too, if the perception of touch is not more confused with two fingers, and consequently more liable to lead to error. As a question of room, one finger must be preferable; if I had to reach the ear, and found some difficulty in getting one finger between the pubes and head of the fœtus, *with two it must be still more difficult*. That two fingers, in cases of first labours, often give unnecessary pain, no one will, I imagine, deny; and, therefore, they are objectionable on that point. On the question—which finger, supposing *one only to be used*, I should say, the index is immeasurably superior to any other. It is certainly shorter than that which is termed the long finger; but that is more than compensated for by its freedom from connection on the thumb side; whereas the fingers, on either side the long finger, reduce its exploring powers infinitely below that of the index finger.

The time when examinations should be instituted, has been debated at great length; in my opinion, with a well informed accoucheur, it matters little whether he examine during the presence or absence of a pain. If the pain be present, he knows how liable the membranes are to be ruptured prematurely, and the evil consequences thereof, which

far from trifling. If the pain be absent, he can ascertain very correctly *how far the labour has advanced.* If present, by its force, pressure, &c., he can form a good idea of the probabilities likely to occur, and when. A careless person, by examining during a pain, may not only rupture the membranes prematurely, but lay himself open to difficulties, that would otherwise never occur. First, he loses all calculation as to the probable conclusion of the case; secondly, he converts an easy into a difficult and tedious labor. It is a practice with some practitioners, to rupture the membranes very generally, when they have an opportunity, *to save their time as they suppose.* This is a most pernicious and unwarrantable mode of proceeding. I grant, that in many cases, quick delivery may follow; but taken as a whole it loses more time than a contrary practice. I feel quite certain, that it ought not be practised in first and second, and I very much doubt the good result in third, or even fourth, labours. In females, who have had frequent births (*say any number above four or five,*) the rupturing of the membranes, when the dilation is sufficient, will, no doubt, expedite delivery; but I have seen cases, after eight or ten children, retarded by this practice: these certainly may be few; nevertheless, it shews that the premature rupture of the membrane is often a more serious evil than is generally supposed. I may mention, also, that I have seen two or three cases in my practice, where the membranes were so morbidly thickened, and so strong, that no efforts of nature it is presumed, would have been able to rupture them, and even by artificial means it was not so very easy—(see *Lancet*, vol. II., 1839 and 1840.) With regard to the question of touch, two objects are to be kept in view:—1stly. *What progress has labour already made?* —2ndly. *What prospects are held out for the future managemeot of the case?* The former can only be ascertained *in the absence* of a pain; the result of previous efforts may be *correctly ascertained;* afterwards, during the *presence of a pain*, its force, duration, pressure of the soft parts, and capabilities of the pelvis, will enable the practitioner to form a tolerably correct idea of what the case may be.

In first, and sometimes in second, labours, the accoucheur has to overcome the feelings of delicacy to a certain extent, to accomplish his object. At this period, I adopted the following plan, which, from practical experience, I find the best: 1stly. I make my advances, for an examination, to an extent of bringing the hand in contact with the external parts *during a pain;* but I proceed *no farther until the pain is gone off*, when I ascertain what the natural efforts of labor have effected. —2ndly. *That gained*, my next intention is to measure the force, length, and pressure of the expulsive efforts, and, combining that information

with the state of the parts concerned in parturition, I *judge of the future;* for which purpose, I keep my hand in perfect quiet, and without withdrawing it, *wait the return of a pain,* when all the necessary enquiries are easily made. Where the female has had many labours, there is no difficulty in proposing examinations wherever it may be required; *indeed, they rather solicit the enquiry.* In the experience of young females, particularly first labours, the advances will always be best made during the pain.—first, in the *absence,* and subsequently in the *presence,* of pain.—[London Med. Times.

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Art. 7. *Lactation, its Influence on Conception.*—Dr. Loudon, in a work on the law of population and subsistance, propounds the theory that the laws of nature require lactation to be prolonged for three years, and expresses an opinion that the antagonism between the uterus and mammæ is so great as usually to prevent conception in women who have infants at the breast. This opinion, however, does not accord with the facts stated by Mr. Roberton, and is even more decidedly at variance with the results arrived at by Dr. Laycock. Dr. Laycock states that 135 married women yielded 209 pregnancies during 766 lactations, or 1 pregnancy in 3·66 lactations, or 27 per cent. Those 209 pregnancies occurred in 76 females, that is to say 56 per cent. became pregnant while suckling; but in 30 of these pregnancy under these circumstances occurred only once. If, therefore, they be deducted, there remain 46, or 33·9 per cent., or nearly 1 in 3 who became pregnant on more than one occasion while suckling; and 19 of these, or 1 in 7; had always (after the first pregnancy) conceived while suckling.—[From the British and Foreign Medical Review, April, 1844.

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## ANATOMY AND PHYSIOLOGY.

Art. 8. *Escape of ova independent of Fecundation, and the connection of this with Menstruation.*

Each act of menstruation is connected with the maturation and discharge of an ovum. Numerous cases in proof of this are related (in addition to those formerly recorded by him, and by M. M. Gendrin, Negrier, and others,) by Dr. Robert Lee; others by Mr. Girdwood. M. Raciborski has four times found that ova had been recently discharged from the ovaries of virgins who died at or near the period of menstruation; and Bischoff has also four times found Graafian vesicles, containing effused blood, in girls who had recently menstruated.

This menstrual discharge of an ovum is said by Raciborski and Bischoff to be followed by the formation of a corpus luteum, similar to that which is formed when the ovum is impregnated and developed. [But in this I have no doubt they are mistaken, If it were so, one or more corpora lutea should be found in the ovaries of all who die while the habit of menstruation continues: for the *corpus luteum* which forms when impregnation has taken place, is distinct not only through the pregnancy, but for more—often much more—than a month after delivery. Neither are the cavities which are left after the menstrual discharge of ova, or the processes by which they are closed, at all similar to those found when impregnation has taken place. In many examinations of ovaries I have not yet seen a case in which, without impregnation, any thing has been found which could be mistaken for a *corpus luteum* formed after an ovum has been discharged and impregnated.] Mr. Girdwood believes that the cicatrices left after the discharge of menstrual ova may be counted, so as to indicate the number of ova discharged and the number of times of menstruation. [But recently I have examined a case in which a girl of seventeen had not menstruated for four months before her death, but previously had menstruated regularly; the ovaries showed no cases of cicatrices. Probably, therefore, the cicatrices remain for a time distinct, but are gradually obliterated, as they are in the nearly analogous case of the discharge of Peyer's and solitary glands of the intestines.]

3. The menstruation of women in so far as the periodical maturation and discharge of ova is concerned, is analogous to the *heat* or *rut* of animals. The phenomina, according to Raciborski, may be most distinctly seen in the sow; but in all the domestic mammalia at their period of heat one or more follicles attain their highest degree of development, project upon the surface of the ovary, and at length burst with hemorrhage into their containing cavities, and this whether copulation have taken place or not. Bischoff has also repeatedly found the same things occur in bitches and rabbits whose uterus and tubes have been extirpated: they have heat, the ova mature and detach themselves and pass into the remaining portion of the tube, but of course cannot be impregnated.

4. The discharge of the ova and their passage along the tubes are independent of impregnation and the passage of the seminal corpuscles. This is evident from the facts already mentioned; and others are furnished by Bischoff. In one experiment he kept a bitch carefully secluded till the period of heat ensued. She then copulated once, and immediately after he extirpated the left uterine horn, ovary and ovi-

duct. The copulation had lasted a quarter of an hour; and he found that the semen had penetrated to the upper angle of the uterine horn; but not into the tube. He found also five ova in the oviduct more than two inches from its abdominal orifice; a distance sufficiently great to prove that they had not been detached in the copulation. Next day he killed the bitch, and found that spermatozoa had reached about a quarter of an inch in the right tube; he found also five ova in the same tube, and as many *coapora lutea* in the right ovary, but none of the spermatozoa had come in contact with the ova. These cases proved the detachment of ova before copulation. In some others Bischoff found that they were not detected till long after the act. In some he found that they were undetached twenty-four hours after copulation, and that the seminal corpuscles had passed on towards them. In others also he found the independence of the passages of the ova and the semen still more marked; for example, several days after copulation, ova were found fecundated in one tube, but in the other spermatozoa alone, none of the Graafian vesicles in the corresponding ovary being either enlarged or fully developed.*

5. Thus, according to the period of heat at which copulation takes place, will be the place at which the semen meets the ovum. If it be early, the ovum may not escape before the semen reaches the ovary; if late, the ovum may have arrived at the uterus; and probably if it have arrived at the lower or uterine third of the tube before it comes in contact with the semen impregnation is impossible on account of the changes which the vitellus has already undergone. In women it is in like manner near the period of menstruation that impregnation is most likely to occur. It may take place just before menstruation if the ovum be just mature when the semen reaches the ovary: or some days, the ovum after its discharge remaining impregnable till the semen reaches it. Or, again, as many analogous circumstances in lower

*These facts bear on the question of the possibility of a woman conceiving by two different men; and I find a recent notice of a case, often referred to, of a negress who having, as it was believed by herself and others, conceviod twice in the same night, first by a negro and afterwards by a European, bore twins, of which one was a pure negress and the other a mulatto. Dr. Hillie a Dutch military surgeon, in Surinam, where the delivery occurred, adds that the children were living in 1841, that they were eight years old, that the black child, which was at first the strongest of the two, remained so, and that the mother had died some time previously, and on examination was found to have normally formed genital organs. (Casper's Wochenschrift, Jan 28, 1842.)

animals prove, an ovum may by the sexual excitement be hurried on to its maturity and discharged; and so, in unusual cases, impregnation may take place at a greater than usual distance from the menstrual period. Still the most common time must be, as common observation shows it is, either during or very near the menstrual period. M. Raciborski has found that in one hundred women there are not more than six or seven in whom this is not the constant rule.

6. All these circumstances prove a closer analogy than was supposed to exist between the discharge of the ova of mammalia and those of the fish, batrachia, and others in which the ova are discharged from the body and impregnated external to it. In all alike the discharge of the ova is an independent act; the differences are in the distances from the ovaries at which the semen is usually brought into contact with it.—[PAGET'S Report on the Progress of Anatomy in Brit. and For. Med. Rev.. Jan., 1844.

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ART. 9.—*The periods regulating the recurrence of vital phenomena*; Being a General Summary of previous Contributions to Proleptical Science. BY THOMAS LAYCOCK, M. D., Physician to the York Dispensary.

The communications I have made to the Lancet from time to time on the laws of periodicity, as exhibited in the recurrence of vital phenomena, have been published at considerable intervals, and extend into two or three volumes. I have thought it would be well to give the readers of my previous papers such a general view of the whole as may assist them in appreciating the importance and extent of the subject, and guide them in any future remarks they may be inclined to make.

While it is the prerogative of reason to look both "before and after," man has always manifested the most earnest desire to look before and know the future. Two means have been adopted, in all ages, to attain this end, namely, divination, or the consultation of supernatural beings, real or supposed; and the observation of natural phenomena, and of the times of their recurrence. It must have been soon found that there was a regularity in the latter. Day constantly followed night, and night day; spring succeeded winter, and summer succeeded to spring: the ebbing tide changed into the flood, and the flood tide fell to the ebb. And so, also with physiological phenomena; the infant grew into youth, the youth became a man, and manhood sunk gradually into the decrepitude of old age. Hence man has learnt to predict a variety of events in nature and society with absolute certainty. He knows that the storms

of winter will surely pass away and be succeeded by the warmth of spring; that the flood-tide will assuredly, in a few hours, be at ebb: and so, also, with a variety of phenomena implicating the individual, as the duration of pregnancy, the reccurrence of the hour of sleep &c. Now, all natural phenomena being finite, must be periodic, because the time within which they are circumscribed is itself a period, and capable of division into less periods. The science which investigates the laws of recurrence of events involving individuals and societies of men, measures their periods, and applies the knowledge thus obtained to practical uses in connection with the sciences of medicine and of political and social economy, is the science which I have termed PROLEPTICS, from a *Greek word signifying* an anticipation, to anticipate, seize before. Proleptics, then, is the science of anticipating events.

Of course the science of proleptics recognises no mysterious or supernatural agency more than is recognised in astronomy, or any other natural science; it is founded altogether on the observation of phenomena, with special reference to the order in which they arise. That order may be ascertained by pure observation, or may be calculated from principles and laws already known, or may be infered from the relations of cause and effect.

In predicting proleptically the return of an ague-fit we are guided by pure observation; from this source we know that if the fever be a quotidian the febrile paroxysm will return next day, at the same hour, as surely as the sun will rise after having set, and we anticipate it accordingly. In like manner we know that in a malarious district we may expect to have bilious remittents in summer, quotidians and tertains in spring and antumn, and quartains in winter.

Proleptics is not limited to periods of any particular duration; it applies itself alike to periods of hours or of thousands of years. It is within its province to investigate the changes induced in the earth and in society at the completion of grand cycles, as well as the changes induced during a single revolution of the earth on its axis or round the sun. It concerns itself with all astronomical phenomena, because they are eminently periodic; it traces the laws of recurrence of cosmic and telluric changes, with special reference to the influence of those changes on man, either as an individual or in society. Proleptical science is not confined to circular phenomena, for it sees polarity and oscillatory movements in regularly reccurring events. The impulse given to human society by an exoteric force, as, for example, when meteorological changes induce destructive epidemics, may continue long after the cause has passed away, just as a pendulum swings backwards and

paroxysms observed in intermittents, gout, &c. (*Lancet*, 1842–3, p. 125, 199, and 425.)

The preceding are the minor periods of development, the esoteric series commencing with conception, and go regularly on unless broken up, and a new series be begun, by some powerful influence on the system. It is by these periods that we can theotretically explain the period of incubation of contagious and epidemic diseases. It is by these, too, that we can understand the "singular coincidences" observed in families, as to death, time of sickening from contagious fever, &c., the period of conception of the mother being a common point to which the esoteric periods of the offspring can be referred in virtue of these periods being precisely alike as to the date of conception, and the circumstances of their life undergo similar vital changes at the same time, because they are equally exposed to the same exoteric agencies, and undergo the same series of esoteric changes. An example of this has been given (*Lancet* 1842–3, vol. i., p. 425,) and others might be quoted. The coincidences of this kind have been attributed to animal magnetism, and adduced as a proof of the reality of the zoo-magnetic force.

The seasonal and annual changes and the period of utero-gestation and of fœtal life, are intermediate between the preceding and the major periods of development. The term of fœtal life is composed, both as regards the parent and offspring, of minor esoteric periods, consisting either of the week of seven lunar days, or the week of seven solar days, but generally the latter. The analogous process in insects occupies the whole life, from the vivification of the ovum to the imago state, and its minor periods are marked by the evolution of the animal from the ovum, the successive moults, and the chrysalis state. This period of embryonic and fœtal life is of varying length in insects, reptiles, fishes, birds, and mammals, but is always a multiple of a lunar or solar day (*Lancet*, 1842–3, vol., p. 124,) and always heptal, or referrable to 7.

The intermediate periods above alluded to pass insensibly into the major, and the major periods complete the whole period of life. The primary unit of the latter is a solar year, subdivided into four portions, by the equinoxes and solstices, which constitute two means, one maximum, and one minimum. (Vide *Lancet*, 1843–4, vol. i., p. 85, 353. All the preceding have reference to the individual, and the minor have reference to the individual exclusively. The basic unit of years has, however, a bearing upon man, as constituting society, and is the unit limiting the periods of those exoteric causes which influence the spread and mortality of epidemics, and induce physiological mutations on a large scale, as well in man as in animals, and vegetables, through their

action on the atmosphere, and the crust of the earth. Vide *Lancet*, 1843-4, p. 430, for the discussion of these periods.

To recapitulate: according to the facts previously stated, the periods upon which others must be calculated are the following: 1. The barometric or lunar day; 2. The solar day; 3. The lunar week; 4. The solar week; 5. The lunar month; 6. The solar year, with its four subdivisions; 7. The week of years, or septenary period; and, lastly, the lunar cycle of eighteen years, with one maximum and one minimum. Probably others will be added to these, as, for example, a lunar year, with five or six subdivisions, a large cycle of years, &c. I think, however, facts sufficiently numerous have been stated to point out those just enumerated, as the periods round which future observations should be grouped.—Bul. Med. Sci. from Lancet.

## MATERIA MEDICA AND PHARMACY.

ART. 10.—*Arsenical Paste of Frère Come.*—Arsenious acid is one of the best known caustics; it would certainly be preferred for cauterizing cancers, if its absorption were not to be dreaded. By employing it with care, nevertheless, and limiting its action, it may yet be usefully applied. Several receipts for arsenical caustic pastes are published in the Formulaire of M. Bouchardat; that of Frère Come has lately attracted the attention of several surgeons. Frère Come died without making known its composition: and M. Souberbielle, his relative and pupil, alone continued to make use of it with as much success as his master. M. Souberbielle communicated the formula to M. Manec, who applied the paste with very advantageous results. It is prepared in the following manner:—six grains of white arsenic, one gramme and ten grains of cinnabar, fourteen grains and a half of calcined sponge, powdered together. The proportion of arsenic is as from eleven to twelve to the hundred, and consequently stronger than in any known preparation, excepting that of Roussellot. When it is about to be used, the powder is mixed with a little water to the consistence of pap, and is then lightly spread over the ulcerated surfaces with a brush, care being taken to use only a small quantity, it being better to have recourse to repeated applications than to run the risk of considerable absorption. It is then covered with a piece of moistened agaric, which becomes detached at the end of ten, fifteen, twenty, or thirty days, sometimes later, and separates with the slough. After this separation has been effected, M. Souberbielle dresses

the wound with the *yellow pommade of Frère Come*, prepared as follows: thirty-two grammes of yellow wax, forty-eight grammes of rose oil, seventy-five grammes of camphor, and one hundred and fifty grammes of Goulard's extract. This ointment is applied, spread upon linen, until the wound is cleansed of the whitish layer which covers it. If fungous excrescences should reappear afterwards, a renewed application of the paste is made, and repeated until the cancer is entirely destroyed. A very important remark is connected with the extent of the ulcer; if it exceeds three square centimetres, the treatment must be divided, in order not to risk absorption by too large a surface, and with that view not to cauterize a new portion until after the separation of the first slough. When the edges are callous, they must be stimulated by a blister, the caustic not acting except upon a moist and raw surface. M. Manec says he has ascertained by numerous experiments, that it is not necessary to remove the cancerous parts with a knife, before applying the arsenical paste, and that the diseased parts, whatever the thickness and depth of their roots may be, are specially and exclusively destroyed by the caustic, whilst the healthy parts are scarcely injured. M. Manec has also ascertained by experiments with Marsh's apparatus, that arsenic was absorbed in certain proportions, and that the urine yielded traces during a period varying from four to five days, according to whether absorption had been more or less rapid. The fæces have afforded traces of arsenic seven or eight days after the urine had ceased to yield any.—[American Journal, p. 468, from Med. Times, Sept. 1844, from Bouchardat's Annuaire for 1844.

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Art. 11.—*New Salt of Mercury and Quinia.*—The combination of oxymuriate of mercury and tincture of bark has been long known as a remedy for the treatment of scrofula and enlarged mesenteric glands, also in the treatment of strumous ophthalmia. This combination is well known to be unchemical, the salt being decomposed by the bark. Mr. R. N. M'Dermot of Dublin, convinced of the value of a combination of the active principle of the barks with salt of mercury—"a combination which, according to the concuring testimony of various physicians, accelerates, in a remarkable manner, the constitutional action of mercurials, was brought to think that a definite compound might be formed in which the bichloride would perform the part of an acid, and the alkaloid quinia form the base, and which would combine the theraputic value of these two important substances." On trial he found the results were exacly as he had anticipated. He obtained a double salt, a proto-

chloride of mercury and quinia, chemically combined. On subjecting it to the strictest analysis, no trace of bichloride could be detected. The intimate combination of the active principle of the bark with mercury in the form just indicated, will, in his opinion, render it less liable to produce the ill effects of mercury on some constitutions, while its effecacy as a general remedy must be much enhanced. He anticipates that the combination of these two agents will rarely fail of producing a happy result in the diseases of the eye generally, but especially when scrofula is present.—[Dublin Medical Press, March 13, 1841.

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Art. 12.—*Valerianate of Zinc.*—This new preparation is extolled by some of the Italian physicians as a very powerful remedy in several nervous affections. It is formed by adding the protoxide of the metal to the vegetable acid to saturation, and then slowly evaporating the solution. It is administered in the form of a pill in the dose of one or two grains. in the *Bulletino delle Sc. Mediche* some cases of neuralgia successfully treated by it are recorded.

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Art. 13.—*Chloride of Magnesium.*—This has lately been recommended as a saline aperient by Dr. Lebert. It is said to produce no injurious effect whatever on the stomach, and if occasionally it gives rise to any unpleasant sensation, it inconveniences less than most other purgatives. It would also seem to favor digestion since its purgative action is followed by an improvement of the appetite. The mean dose as an aperient is 32 grammes for an adult, and half that quantity for a child of from ten to fourteen years of age.—[Prov. Med. and Surg. Journ., 24 April, 1844, from Gaz. Ned. de Paris.

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Art. 14.—*Prestat's Adhesive Plaster.*—The following composition is said never to crack, and not to inflame the skin:—Empl. diachyl. gum, four hundred grains, purified rosin, fifty grains; tereb. venet., thirty-eight grains, are mixed together at a gentle heat, and then twelve grains of gum mastich and twelve grains of gum ammoniac incorporated, and the mass spread on linen. In winter, it is advisable to add ten grains more turpentine and twelve grains of ol. amygdal.—[Ibid., p. 469, Ibid., from Journ fur Prakt. Chem.

# MEDICAL JURISPRUDENCE AND TOXICOLOGY.

ART. 15.—*Antidotes of Corrosive Sublimate, Copper, Lead, and Arsenic.*—BY MM. BOUCHARDAT AND SANDRAS.—By means of numerous experiments, first made in the laboratory and then repeated on dogs, MM. Bouchardat and Sandras have arrived at many interesting results relative to the antidotes of corrosive sublimate, copper, lead, and arsenic. All these are detailed at length in their long papers on the subject. Their conclusions were, that the following substances may be regarded as antidotes, and employed as such in medicine:—

*As antidotes for corrosive sublimate.*—A mixture of zinc and iron filings; or powder of iron reduced by hydrogen; or the moist persulphuret of the hydrated peroxide of iron.

*As antidotes for copper.*—A mixture of zinc and iron filings; iron reduced by hydrogen; porphyrized iron; zinc filings; or the persulphuret of the hydrated peroxide of iron.

*As an antidote for lead.*—The moist persulphuret of the hydrated peroxide of iron.

*As antidotes for arsenic.*—The moist hydrated peroxide of iron; the dry hydrated peroxide of iron; and the moist persulphuret of the hydrated peroxide of iron.

These experienced chemists add the following reflections:—This last preparation, the persulphuret of the hydrated peroxide of iron, possesses this superior advantage over all the rest, that it changes the nature of all the four poisons above noticed, and is especially applicable in those cases where we have not had time to find which of the poisons has been taken. As to the manner of administering these antidotes, and the doses which it is necessary to administer, the simplest means appear the best. The powders of zinc and iron may be suspended in any electuary, or they may be swallowed in wafer paper. The magma of the hydrated preparations of iron may be swallowed in the form of jelly, in which they are procured from the druggists. Several draughts of lukewarm water ought to follow the antidote, and the fauces be tickled with a feather, to excite vomiting and the expulsion of the poison. The efforts at vomiting scatter more effectually over the stomach the antidote which is administered. As to dose, the experiments proved that 100 grains of the powder of iron or of zinc sufficed to prevent any bad effects from 15 grains of the acetate of copper. Fifteen drachms of the moist magma of the persulphuret were required to produce the same effect with the same dose (15 grains) of the acetate of copper. To act as an antidote to 4½ grains of arsenious acid, 15 drachms of the moist

magma of the persulphuret, or 30 drachms of the moist hydrated peroxide of iron, or 20 drachms of the dry hydrated peroxide of iron, were required. With regard to the time when these antidotes can be administered with advantage, in so far as the acetate of copper is concerned, the lapse of 40 minutes from the time of swallowing the poison ought not to be regarded as a sufficient reason for not administering the antidote; but arsenic is more quickly absorbed. Nevertheless, the antidote should always be administered, because, though it will not neutralize what is absorbed, it will prevent its further absorption by decomposing what remains in the stomach.—[Braithwaite's Retrospect.

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ART. 16.—*Mesmerism!!*—Worship Street, London.—On Monday, a young man, named William Bowen, was charged at this office with stealing a linen sheet. The prisoner, who had a somewhat pensive expression of countenance, of a death-like paleness, was supported at the bar by a young man somewhat older than himself, and who was stated to be his brother; his eyes were entirely closed, and he had every appearance throughout the examination of being in a profound sleep. The police officer stated that he was sent for on Saturday night to a pawnbroker's, where he saw the prisoner, who had just before presented the sheet produced for pledge, and which, the pawnbroker suspecting had been stolen, had determined to give him into custody. The officer found that the sheet had been stolen from the prisoner's landlady, who was a laundress. Mr. Bingham, the magistrate, noticing the appearance of the prisoner, asked him if he understood the nature of the evidence against him. The prisoner took no notice of the question, but remained entirely motionless and silent, and seemed to be in a state of total insensibility. Mr. Bingham inquired if any one could give an explanation of the prisoner's extraordinary conduct. Sergeant Lambert said he could, partially. Almost immediately after the prisoner had reached the station on Saturday night, and had given a true description of himself, he appeared to receive a slight shock, and then fell into his present state of somnolency, in which he had remained ever since. No notice was taken of it for some time, thinking he might be sleepy, but as it at length became manifest that it was not the effect of fatigue, great alarm was excited lest he should be dying, and Mr. Coward, the divisional surgeon, was sent for and promptly attended, but after being with him a considerable time, went away, declaring he could do nothing for him. At length, one of the officers entered the station, to whom the prisoner's family was slightly known, and suspecting, from the circumstance of one

of his brothers being a lecturer on mesmerism, that he might be in a mesmeric trance brought on by the position in which he was placed, the brother was sent for to get him out of it. On coming to the station, the brother expressed his inability, after a few experiments to relieve him, but entered into conversation with the prisoner, who answered the questions put to him readily, although he continued apparently in a sound sleep. The only question put by the brother at the station, that the sergeant could recollect, was as to when the prisoner felt he should come out of his trance, to which the answer was, as he understood it, "Saturday week, eight in the evening," corresponding with the hour at which he was taken into custody. The prisoner had not taken the slightest nourishment, either liquid or solid, since he had been locked up, nor expressed a wish, either verbally or by gesture, for any thing. Mr. Bingham said, that under these circumstances, he should remand the prisoner. The prisoner was then supported out by his brother and one of the officers, but in precisely the same state as when he entered the room.

The young man was again brought up on Tuesday, and having then recovered from his state of mesmeric coma, the case was gone into and satisfactorily proved. A person who stated himself to be the prisoner's brother, stepped forward, and, with great gravity, said his brother was a person peculiarly susceptible of the influence of mesmerism. If he looked steadfastly at any particular object, he was sure to be thrown into a state of mesmeric coma, which deprived him of the use of his natural senses. The mesmeric influence operated in different ways upon him, for, on a former occasion, when the prisoner was so affected, he manifested a disposition to destroy every thing that came in his way, and his friends were obliged to put him under restraint. His late visitation was produced by some object to which his attention was riveted last Thursday evening at the Surrey Theatre, and his friends, who observed the fit approaching, exerted themselves without effect to avert it, as they knew that he was unconscious of what he did when under its influence. *It was urged that the prisoner was in a state incapable of judging between right and wrong when the offence was committed.* Mr. Bingham could not listen to such an excuse. He required the prisoner to pay a fine of 20*s.* for unlawfully pawning the property, and also 2*s.*, the amount received upon it, or be committed in default for 21 days to the House of Correction.—[Amer. Jour., from London Atlas, Feb. 24, 1844.

T. R. B.

ART. 17.—*The Queen* v. *Trilloe.—Infanticide.*—There was strong evidence to prove that the child had been born alive, and that the prisoner had strangled it by fastening a handkerchief or some such thing round its throat, but it was clearly proved by Mr. Wood, the surgeon, who examined the body of the child, that it must have been strangled before it had been separated from the mother by the severance of the umbilical cord, and it was further stated by Mr. Wood, that a child has, after breathing fully, an independent circulation of its own, even while still attached to the mother by the umbilical cord, and that, in his judgment, the child had breathed fully after it had been wholly produced, and had, therefore, an independent circulation of its own, before and at the time it was strangled, and was then in a state to carry on a separate existence.

*Judge Erskine*, in summing up, said, "If you are satisfied that this child had been wholly produced from the body of the prisoner alive, and that the prisoner wilfully, and of her malice and aforethought, strangled the child after it had been so produced, and while it was alive, and while it had, according to the evidence of the surgeon, an independent circulation of its own, I am of opinion that the charge in the second and third counts of the indictment is made out against the prisoner, although the child, at the time it was so strangled, still remained attached to the mother by the navel string." Verdict—Guilty. The case was reserved by the judge for the opinion of the fifteen judges, who held the conviction right.—[Amer. Jour. of Med. Sci. from I. Carrington & Marsham's Nisi Prius Rep. p. 650. T. R. B.

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ART. 18.—*Cryptogamic Vegetations on the Mucous Coat of the Stomach after death.*—Dr. Lee describes the appearances found in the stomach and upper part of the intestinal canal of a corpse which had been interred for three months, and then exhumed for medico-legal investigation. The mucous surface of the stomach was of a deep chocolate color, and on it were scattered numerous white circular bodies, elevated at the edges and depressed at the centre; some of these were very minute and had the appearance of a white powder sprinkled on the membrane. This appearance has been noticed by Orfila, as one of those which had been mistaken for arsenic. Buchner, too, has mentioned a white, granular substance containing fat, which was found lining the stomach. The question arises, what is the intimate nature and origin of these bodies? Are they fungi? They are certainly not calcareous depositions. They are partially soluble in alcohol, and they melt before the blowpipe.—*Dublin*

*Journal.* A correspondent in the *Providence Journal* found similar appearances in a body which had been interred fifteen months. These particles, examined chemically, yielded the same results as adipocere, of which they probably consist.—*Lancet*, April 20, 1844. Certainly this last is the correct solution. Orfila examined these appearances, (found equally in the stomachs of those who had not been poisoned,) and ascertained that they consisted of fat and albumen.—[Medical Journal, p. 532. T. R. B.

## BIBLIOGRAPHICAL NOTICES.

1.—*A Treatise on Pathological Anatomy*, By Carl Rokitansky, M. D., Professor Extraordinary of Pathological Anatomy in the University of Vienna.

Part 1.—Containing the Abnormal conditions of the organs of Respiration. Translated from the German with additions of Diagnosis from Schoenlein, Skoda, and others. By Dr. John C. Peters, New York, 1845.

Such is the title of a very valuable addition to Medical literature. We confidently expect that the work will be extensively patronized, as it is every way worthy of liberal encouragement.

2.—*The Medical Student, or Aids to the Study of Medicine.* A revised and modified Edition. 1844.

This work is from the practised pen of Professor Dunglison, and is evincive of his well known talents.

3.—*An Essay on the Philosophy of Medical Science.* "I trust that I have got hold of my pitcher by the right handle." By Elisha Bartlett, M. D., Professor of the Theory and Practice of Medicine in the University of Maryland. Lea & Blanchard, 1844.

This is an elaborate production of more than three hundred pages from the pen of a very distinguished American physician. On some future occasion we shall present to our readers an analytic review of the work.

# THE WESTERN LANCET.

CINCINNATI, NOVEMBER, 1844.

THE severe indisposition of the Editor has precluded to some extent his attention from the affairs of the Lancet, in the making up of the present number. He has therefore to solicit the indulgence of his subscribers, if any deficiencies, or mistakes, are discovered.

OUR readers are already aware, through the common periodicals of the country, that Woodville, Mississippi, has been severely scourged by a visitation of Yellow Fever. Below we present extracts from a letter received from an esteemed Medical correspondent, who has lately been on a visit to the place.

We should be much gratified were some Medical practitioner of Woodville, or vicinity, to give us a more detailed account of the desolating epidemic. Our correspondent speaks of certain "hollows that run up within a quarter or half a mile of the town forming the heads of" several creeks. Especial examination should be made of these "hollows," in order to arrive at satisfaciory conclusions concerning the origin of the disease.

WOODVILLE, MISS., Sept. 12, 1844.

The town of Woodville is situated about twenty-eight miles from Bayou Sara, on the Mississippi; about forty from Natchez, and about fifteen or twenty from the Mississippi River. It is situated on high ground with a gradual slope in all directions, leading off into hollows that run up within a quarter or half mile of the town, forming the heads of Tompson's creek, the Buffalo and other little branches. There is no creek or ponds or low lands in the immediate vicinity. The town is built very compact, formed in a square, with the Court House in the centre. In short, when you view the surrounding country and the town, you would pronounce it to be one of the most eligible sites for a town of health in the South. I have walked around and through the place; every thing seemed neat and airy, no appearance of filth, no large collections to putrify and render the place unhealthy—no one would or could in my estimation, pronounce Woodville a filthy place. And yet strange to tell, we have been visited with that desolating disease, *Yellow Fever*. And what renders the analysis more difficult, is the fact, that all the surrounding towns are remarkably healthy for the season of the year. The yellow fever does not prevail at New Orleans; there has been only one or two cases in the place, and they confined to the Hospitals. It does not prevail at Bayou Sara. There has not been a single case either

at Bayou Sara or Natchez, or any place along the river; consequently you see the utter impossibility for the disease to have been brought here. We find no adequate cause existing in the place itself, for I have seen towns a third time filthier, and more favorably situated for such a disease, and yet escape. And now, may it not be dependent upon some peculiar condition of the atmosphere, as has often been contended, originating the yellow fever in this place. At least I think it dependent entirely upon the peculiar state of the atmosphere, I have heard it remarked since the prevalence of the epidemic, that even the birds have left Woodville and its precincts, not one is to be seen in or about the town; usually there are a great many. We have had no rain of any consequence for weeks, and it has been quite warm, but not more so than any other season. Taking all things into consideration, it is one of the most astonishing epidemics I ever read of. I presume no one will doubt the fact of its being genuine *yellow fever* when they are informed that Physicians who have practised in New Orleans for years and have seen hundreds of cases, perhaps thousands, unhesitatingly and unequivocally pronounce it the yellow fever. Nearly every man in the place has had the disease. But what fatality for such a small inland town, the disease has been prevailing a week up to this time, and from seven to ten deaths have occurred every day, and Heaven only knows when it will cease its desolations. It is very rapid in its course, the victims are seized with a violent pain in the head, pains in the lumber portion of the spine, in the knees, accompanied with a burning fever; in a short time they commence vomiting, throwing up something similar to coffee grounds, called the black vomit and in a few hours death closes the scene; there is a great similarity in the attacks; after death they turn yellow, this I have seen with my own eyes. Another very remarkable thing, it is spreading into the country, on some of the plantations there are fifty cases, and others occurring. From some of the plantations they had occasion to send to town, and invariably the servant has returned with the disease, although he remained but a few minutes in town, and in this way they have carried it into the country. Nearly every individual that visits Woodville returns home, and in a few hours is taken sick, and the majority die. I have not been informed of the exact amount of deaths as yet, the epidemic is rapidly prevailing. I sat up the other night with my friend Judge Walker, who died. Whether I am to take it I cannot tell; nothing but necessity induced me to set up, as those who are well have generally left and the sick in many places are almost neglected, and the people shun one another as much as possible, thinking every man a moving plague. Yours, &c. J. W. H.

THE

# WESTERN LANCET.

VOL. III. CINCINNATI, JANUARY, 1845. No. 9.

## PATHOLOGY AND PRACTICAL MEDICINE.

ART. I.—*The art of Observing, or the proper Method of Examining Patients, with a view to correct Diagnosis.* BY H. M. BULLITT, M. D., *of Louisville, Ky.*

"In writing a history of diseases, every philosophical hypothesis, which hath prepossessed the writer in its favor, ought to be totally laid aside; and then the manifest and natural phenomena of diseases, however minute, must be noted with the utmost accuracy."—*Sydenham.*

It will, perhaps, be granted, that the universe is governed by eternal and infallible laws. That there is not, within its vast extent, an object that has not a fixed mode of existence, and established rules of action. That such is the fact, as regards the inorganic part of the creation, may be readily verified; since the phenomena of movements that pertain to unorganized bodies, may be reproduced, at the pleasure of the observer, and opportunities thus afforded of determining their modes of occurrence, and of ascertaining the laws by which they are governed. But in the organic kingdom, we encounter greater difficulty, in tracing effects to their appropriate causes, and in making out the relation borne by different objects and phenomena to each other. The characters and qualities of all organized bodies manifest themselves in obedience to peculiar laws —the organic. Over these we have no control, and cannot, consequently, reproduce organic phenomena, for the purpose of observation. We have, therefore to study them as occasional opportunities of doing so, may present themselves; and as these occur under an almost endless

variety of circumstances, which it is exceedingly difficult to appreciate properly, it is scarcely surprising, that the early investigators should have failed in their efforts to unveil the mysteries of organized nature, and that the wonderful conclusion should have been arrived at, that, "the world, although perfect at first, had, from some unknown cause, fallen into disorder, and did not contain within itself, the elements of rectification." This conclusion, however, has been proved by long continued observation, to be incorrect, and the fact is now established, almost beyond the possibility of doubt, that in the organic, as in the inorganic kingdom, there are fixed modes of existence, and uniform and unvarying rules of action. Every vegetable has peculiarites both physical and vital, by which it may, at all times, be identified; and so it is with every animal, from the humblest animalculæ up to man. By means of these peculiarities, the botanist and zoologist have been able to arrange into classes, genera and species, their respective kingdoms, and although they are constantly meeting with individual objects that are new to them, yet "by consulting the established modes of existence and the ascertained rules of action, they find little or no difficulty in giving every such object its appropriate place in their scientific arrangements."

If then, in those departments of natural science, which have been most extensively explored, laws have been discovered, acting in a regulated manner, and producing each, its specific effect, is not the inference a fair one, that the same regularity obtains throughout the natural world, and that each and every object in it manifests its phenomena, in obedience to eternal and unchangeable laws? This admitted, then does it not follow, of necessity, that physiological and pathological phenomena, occur, also, in accordance with uniform and established rules? To this latter question, we conceive, that none other than an affirmative answer can be given, unless it should be contended that the phenomena in question are unnatural and accidental; and this objection can only apply, if at all, to the pathological. The objection, however, would argue such a degree of presumption, that no modest man could consciously entertain it. It necessarily pre-supposes, an experience co-extensive with the order of nature, and to this, vanity itself could scarcely pretend. The time has been, when nothing could be credited, that had not the sanction of high authority; but at the present day, we discover a decided tendency, on the part of scientific men, to look upon new and remarkable phenomena, not as interruptions of the natural laws, but rather as indications of the existence of unknown laws. This feeling is, we think, gradually finding favor amongst modern pathologists, and we hope the day is not far distant, when it will pervade the whole medical community;

for, on its establishment, must depend, in a great measure, the future improvement of medicine.

It has, again, been argued, that pathological phenomena are so exceedingly numerous, and the laws which govern them influenced by such a multiplicity of circumstances, that they are incapable of that kind of arrangement, which alone can enable us to deduce from the correct, and settled principles. But this argument is also directly at variance with all our experience; for, whenever natural phenomena have been correctly and completely observed, we have been able so to classify and arrange them, as to make them yield uniform results. This alone we consider presumptive evidence, that the same kind of certainty attaches to those phenomena which have not been completely observed; and consequently that we shall find pathological phenomena when thoroughly understood, capable of affording results that may be implicitly relied on.

Assuming, then, as a settled principle, that the signs and symptoms of disease manifest themselves in obedience to fixed and invariable laws; and that when completely observed and properly understood, they are capable of yielding uniform results, we will proceed, at once, to the consideration of the proper method of observing and appreciating them.

We have already spoke of clinical observation, as an *art*, and we have done so, because we are impressed with the belief that no one can note accurately either the functional or physical signs of disease, until he has served a regular apprenticeship to the art of observing at the bed side of the sick; or, in other words, until he has pursued the same course, in learning to observe, that he would have to follow in learning any other art. It is then, to aid the student, in acquainting himself with the ART, of observing and appreciating the morbid manifestations, that we have undertaken to write this essay; and as we shall be guided pretty much by the valuable memoir of LOUIS, "on the proper method of examining a patient," we have some hope that our remarks will not prove altogether useless.

On approaching the bed side, the first thing to be attended to, is the degree of intelligence posessed by the patient. If it be naturally good, and in a normal state, we may proceed to interrogate him, as to his previous history, habits, &c., but if, on the contrary, it be either originally defective, or blunted or perverted, by the influence of disease, we can place but little reliance on any thing he states. Even in cases where the intellect is clear; from an indisposition to mental exertion, patients will frequently give erroneous accounts of themselves. So apt, indeed, is this to happen, that we think it would be a safe rule, never to believe the statements of a patient, especially if he be much sick, unless

they are corroborated, by a number of concurring circumstances. In investigating, therefore, the history of a disease, we should never rest satisfied with the first answers received, but should persevere, until by means of cross examination, we have learned every thing, that has any bearing whatever on the case. For instance, we have a patient laboring under some chronic affection: he is asked, how long he has been sick? he is almost sure to date the commencement of his disease, from the time he was compelled to *lie by*, or to forego some of his wonted amusements. But if we enquire more minutely, we shall usually find, that he had been more or less indisposed, for some time prior to this period. And so it is with acute affections. They are nearly always dated from the time the patient had to cease his usual employment; when, in reality, they have commenced several days, or even weeks sooner. Again, a patient may tell us, that he had experienced an attack of some acute disease, as pleurisy, or pneumonia, some three months since. Now, as a general rule, he will be incorrect, both as to the kind of affection, and as to the time of its occurrence, as we may satisfy ourselves, by a few cross questions. For instance, by asking the symptons of the disease, we shall find that it was entirely another affection than that he had stated it to be; and so by referring to some remarkable occurrence, prior or subsequent to the period from which he dated the commencement of his disease, and thus assisting his memory, we shall frequently find him wrong as to time.

We may ourselves elicit incorrect answers, by putting leading questions, and this is undoubtedly a very common source of error. We are apt from the "coup d' œil," to form an opinion as to the nature of the affection, and in our anxiety to find our first impression correct, we too frequently ask leading questions, and these the patient will often answer as he thinks we wish them answered. With the ignorant and weak minded (which is the condition of most hospital patients) this is almost sure to be the case: we should, therefore, always be on our guard, in examining such patients, to avoid letting them perceive how we expect our questions to be answered. Thus we see, that to ask questions in the proper way, and to appreciate fairly the answers received, requires no small amount of circumspection, and even of intellectual dexterity.

In examining an individual patient, it is important, that we inquire, first into his age, habits and mode of living, his occupation, his previous attacks of disease, the disease to which his parents may have been subject, or of which they may have died: since each of these circumstances may exercise a modifying influence over the present attack, or aid us in determining its nature. Some diseases, for instance, are almost peculiar

to certain periods of life, as whooping-cough to childhood, the typhoid affection to puberty and early manhood, chronic ramollissement of the brain to advanced age. Others, again, though common to all stages of life, do not obey the same laws, nor yield to the same treatment, at these different periods of existence. For example, catarrhal affections, (particularly the epidemic influenza) and pneumonia are remarkably intractable and even fatal, when they attack the aged, whilst the young and vigorous usually recover from them in a comparatively short time. This is also the case with many cerebral diseases. As regards treatment, it is well known that it is scarcely ever safe to deplete freely a very old person, even where the symptoms seem to call for it.

Habits and modes of living also modify, in a very decided manner, the character of morbid action. A patient, for instance, who has lived entirely on vegetable food, will rarely have as violent attacks of inflammatory disease, as one whose diet has been exclusively, or chiefly animal: and every tyro in medicine is familiar with the fact, that the abuse of spirituous drinks, loss of sleep, and excessive venereal indulgence, so relax and vitiate the system, as to give to its diseased manifestations entirely new characters, and render it incapable, in many instances, of bearing a treatment sufficiently bold to counteract the pathological movements. Physical inaction alone will frequently establish a predisposition to dyspepsia and its attendent train of ailments, and when accompanied by great mental exertion, render the brain peculiarly liable to take on diseased action.

The influence of occupation, in modifying disease, as well as in giving rise to peculiar affections, has been, from time immemorial, a subject of remark. It has, for instance, been, for a long while, known, that those who are employed in hewing stone are frequently the subjects of a bronchitis, which is supposed to be an exciting cause of tuberculous depositions in the lungs. This is certainly not the usual result of bronchitis, and we are therefore led to infer, that it is modified, in some way, by employment. Public speakers, and especially ministers of the gospel, are occasionally troubled with a form of pharingitis, which runs a very different course, and requires different management, from the ordinary forms of this affection. These are instances of the modifying influence of occupation; and, were it necessary, we could readily multiply them.

We have also stated, that some diseases are *peculiar* to certain occupations. These are so familiar to all, that it is scarcely necessary to specify them. Who, for example, has not met with lead cholic amongst the workmen in the metal from which the disease has taken its name?

The mercurial palsy of those employed in gilding buttons, toys, &c., and of the workmen in quicksilver mines, is another well known instance of disease peculiar to occupation. The susceptibility of this class of operatives to the influence of cold, and their liability to a cutaneous eruption, resembling some forms of secondary syphilis, are instances of the same thing. Common laborers who have to make great muscular effort, are subject to diseases of the heart and large arteries, and the manufacturers of mineral acids sometimes perish from asphyxia, from the inhalation of noxious gases. We might thus continue to cite instances, without number, of the influence of occupation, habits, age, &c., in modifying and producing disease, but we deem it unnecessary, as the foregoing are sufficient to call the attention of our readers to the importance of an enquiry into all of these circumstances, in order to discover what connexion, if any, they may have with the case under examination.

The previous diseases of the patient are also to be attended to. They enable us to form some opinion as to the power of the constitution to resist the action of the disease, and also direct our attention to those organs, which are likely to suffer most. We learn farther, from an enquiry of this nature, what affections are of most frequent occurrence, at the different periods of life.

We ascertain the diseases of parents, because many of them are hereditary, and this fact will frequently lead us to a knowledge of the origin and nature of that with which we are contending. For instance, we are called to a patient who is laboring under incipient tuberculous disease, but as yet, neither the symptoms nor signs are sufficiently developed to justify us in making out this unwelcome diagnosis. On enquiry we learn that the patient's parents have fallen victims to this affection, and our suspicions are, at once, confirmed. And, besides, in treating affections which are not hereditary, an acquaintance with the fact, that the patient's parents have died of a disease of this nature, will enable us to avoid a course of treatment calculated to favor the development of the tubercular diathesis; such as repeated and long continued mercurialization, &c.

Thus we see, that even in the present state of medical science, investigations of this nature are indispensable to a just appreciation of disease, and consequently to successful treatment. But, when we reflect, that however bootless such enquiries may now seem, they may, nevertheless, aid much in the future advancement of the science, it becomes our imperative duty to attend, minutely to them. And in doing this, we shall not aim to verify the assertions of authors and teachers, but should recollect, that, as yet, we possess but little certain information on these

points, and therefore keep steadily in view the importance of adding to our stock of knowledge.

Having determined as accurately as possible all of the foregoing circumstances, we may proceed to the study of the disease before us. We ascertain, first, the temperament of the patient, and the conformation of body; for, without such information, we cannot adequately appreciate the morbid manifestations. These are matters to which so little attention has, heretofore, been given, that we can scarcely adduce a striking instance of their importance. But as it is desirable that we should become better informed in relation to their influence in modifying disease, we would earnestly enjoin the study of them. It has been supposed, indeed is fully believed by many, that temperament has a decided and well marked agency in giving peculiarity to diseases; and this opinion is probably correct. But at the same time, we doubt whether a sufficient number of well directed observations have been made to warrant the conclusions, at which writers on the subject have arrived; and this doubt we think justified by the contrariety of the conclusions. For example, it is contended by some, that persons of the lymphatic temperament are most liable to tuberculors and strumous affections, whilst others, no less respectable, have thought these diseases partial to the sanguine temperament. Now the probability is, that both opinions are but partially correct, and that the advocates of each, in their anxiety to verify their respective views, have overlooked those facts, which did not exactly suit their purposes. It is very certain that in consumptive families, we meet occasionally with every variety of temperament, and and yet all perish from the one disease. Still, temperament has probably something to do with the development of the tubercular diathesis, especially in cases where predisposition has not been inherited.

The choleric and melancholic temperaments have also been thought to favor the occurrence of certain affections, but our knowledge of the extent and character of their connexion with the pathological laws is abundantly limited. The whole subject, therefore, of the influence of temperament in modifying morbid action, is still open for investigation; and there is no reason, why it may not be as well investigated in the Mississippi Valley, as in any other part of the world. Indeed all investigations of this character should be carried on, at the same time, in various latitudes, that we may be able to ascertain to what extent climate and locality influence the manifestations of disease. This is particularly to be desired, since an impression, which is probably entirely groundless, has become prevalent in some of the Southern and

Western states, that the diseases of the different sections of our country are so diverse in their nature, as to render the principles of treatment, which hold in one section, wholly unavailing in every other. This opinion may be correct, but we confess we are not willing to subscribe to it, for by so doing, we should virtually reject what we have been endeavoring, throughout this article, to maintain, viz: that the pathological laws are uniform and unvarying in their operation, and, consequently, that the principles which are applicable in the treatment of diseases, in any one section of country, are equally applicable, *ceteris paribus*, in all parts of the globe. We admit that the fevers of the Mississippi Valley may be of more frequent occurrence, and more grave in their forms, than the similar maladies of the North Eastern states; but, at the same time, we hold that the enlightened pathologist, wherever educated, will find no greater difficulty in treating these affections than he encounters daily in adapting his principles to the numerous modifications to which all diseases are liable. It matters not where a physician be educated, whether in the city where he is to practice his profession, or thousands of miles distant from that place, he will prove equally inadequate to the detection of those minute shades of difference in the morbid manifestations, on which may depend the necessity of modifying his therapeutic principles, until he has become familiar with them, by a personal intercourse with the sick, of some years duration. It is impossible for these to be pointed out in a public lecture room; and even in the wards of an hospital, but little more can be done, in the limited period of time allotted in our public institutions, for the reception of a medical education, than to teach the method of observing. Successful diagnosis must depend on the subsequent efforts of the physician. It is, we think, therefore useless to say that the physician, who has been educated in an Eastern school, is less capable, than he who has been educated in the West, of treating the diseases of the Mississippi Valley; for, so long as medicine is considered a science, based upon immutable principles, every candid thinking man must acknowledge that he who is most thoroughly acquainted with these principles, and is best able to diagnosticate the actual state of the patient, ought to be best able to treat disease, whenever and wherever he may meet with it.

But to return from this digression. In proceeding with the study of the case before us, we first endeavour to determine the precise time at which the attack commenced, and to learn as accurately as the patient and his friends can inform us, all the circumstances and symptoms that attended its onset, as well as those that have presented themselves during its progress to the present moment. We have already spoken of the pre-

cautions to be observed in making the enquiries, and the reserve with which we are to receive the statements of the patient. We will only add here, that nothing stated even by the friends or attendants, should be relied on, if it require any unusual effort of memory to recal it. Indeed we are almost disposed to say, that implicit confidence should be reposed in no account, that does not, as it were, verify itself; at any rate, we should give, in our reports of cases, the manner in which we learned such and such facts, and the degree of credibility of our informants. Unless this be done, we cannot know how to appreciate them, when we come to study numerically our collected cases.

In making the above enquiries, we have in view two important ends: First, the discovery of the cause of the affection; Second, the ascertainment of its type and modifications.

Our acquaintance with the causes of disease, is perhaps more limited, than with any other department of the science. It behooves us, therefore, in making our investigations, to neglect nothing, that can have any tendency to enlighten us on this obscure point. We should learn, if possible, the exact condition of the patient's system, at the time of the attack, as well as the circumstances, by which he had been surrounded for some time prior to this. But before we can appreciate their connexion with the case, we must have become familiar with the laws that preside over the healthy actions of the economy, in order that we may know whether or not any of them have been infringed through their agency. In the actual state of medicine, it is, we admit, out of the power of man to accomplish this completely; but by diligence and perseverance in the observation of facts, a great deal may be added to our knowledge of medical etiology.

Our acquaintance with the type and modes of a disease, is, perhaps, more easily acquired. The sources from which we derive information on these points, are, the history, the functional and organic changes. These constitute, in all cases, the means of diagnosis.

The history of a disease comprises its duration, the symptoms, &c., by which it was ushered in, as well as those which have marked its progress,—its effects on the system, and the effects of remedies. From a knowledge of its duration, we determine whether it be acute or chronic, and also form some idea, as to what will be its probable continuance. If organic changes have taken place, unless we know the exact duration of the attack, we cannot form correct notions of their character and extent. We inquire into the condition of all the functions, at the time of the attack, that we may learn whether the patient had previously labored under any affection. We may thus sometimes find, that he had

been suffering from a disease entirely distinct from the present complaint; and hence our ideas of this latter might be materially modified. The symptoms that have shown themselves during its progress, and the effects on the body, as emaciation, and loss of strength, should all be attended to, as well as the effects of remedies, as of blood letting; since they may aid us in making out a diagnosis. We deem it unnecessary to dwell longer on this part of our subject: suffice it to say we are to learn every thing of the history of the case, that can aid at all in determining its nature.

We now come to the most important, as well as the most difficult part of our subject: viz. the examination of the functional and organic lesions present at the time of our visit to the patient. Here will be needed all the tact, ingenuity and experience of a well trained observer; that nothing essential to the diagnosis may be omitted; that questions be not propounded in such fashion as to elicit incorrect answers; that those which are the result of lassitude, or perturbation of mind, may not be received as facts. But above all, how much practice and training are necessary, before one can make successfully the various physical explorations. These are real difficulties to be encountered, and when we feel prepared to meet them, we may proceed with confidence to the examination of our patient.

The functional lesions, or symptoms, may be considered in a two-fold manner: First, those which refer distinctly to the affected part. Second, such as result from sympathetic disturbance of remote organs. In examining, therefore, the symptoms of a disease, we investigate, first, the condition of the functions of the organ or organs most obviously involved. Then we inquire into the state of the functions of every other part. In no other way can we arrive at accurate results. For instance, in pneumonia we have, pertaining directly to the lungs, painful and hurried respiration, imperfect arterialization of blood, cough, and expectoration. These are the local symptoms, and they would, almost of necessity, attract attention. There are, however, usually other symptoms, referable to disturbance in distant organs; as, excitement of the heart, fever, various derangements of the digestive, urinary, and perspiratory functions, and sometimes of those of the cerebro-spinal system. These constitute the second division of symptoms, and should be carefully attended to, since the presence of any of them might materially modify our ideas of the therapeutic indications. And besides, some one of these remote organs may be the seat of a chronic lesion, which, in his suffering from the acute affection, the patient may have entirely forgotten; and yet, unless it be discovered, we may resort to a

treatment calculated to aggravate this, the most serious perhaps of the two complaints. This might readily happen in those cases, and they are by no means unfrequent, in which the brain becomes sympathetically disturbed. Here all the prominent symptoms refer to this organ, and a superficial examination would, of course, lead us to direct our treatment to it, perhaps to the hazard of our patient's life. A little attention, however, to the above rules, would enable us, in all such cases, to detect the real lesion, and thus to avoid doing irreparable mischief. Again, in case of different diagnosis, by inquiring into the state of all the functions, we obtain negative evidence, which will be of immense assistance to us. For example; in the various functional affections, it is only after we have ascertained by careful attention to all the organs, that there is no structural lesion, that we can come to any conclusion, as to the nature of the complaint. We might easily multiply illustrations; but we think enough has been said, to show the necessity in all cases, of a complete observation of the patient. The state of the functions should be ascertained and accurately recorded at the bed side, in the order in which they are observed. It will not suffice, to determine the existence simply of a symptom. The exact time at which it manifested itself, the degree of severity, and whatever changes it may undergo, are also to be reported.

We have already spoken of the difficulty of acquiring a sufficient acquaintance with the various methods of physical examination, to enable one to practice them with success. This has deterred many from undertaking, at all, this study, and has induced others, after ineffectual efforts to surmount it, to denounce, as utterly impracticable, all physical explorations. To the former we would say, that if the difficulties, that oppose the accomplishment of any task, are to be viewed as valid arguments against attempting it, then must all improvement in science, of necessity, cease. For there is no science, or department of human knowledge, that can be mastered, without the exercise of industry, perseverance and talent. The professional pretender, therefore, who pleads difficulty in extenuation of ignorance, is no better entitled to leniency, than the culprit who pleads ignorance of the law in palliation of crime.

Again, we have frequently heard physicians of highly respectable attainments, who admitted the practicability of ascertaining precisely the condition of the heart, lungs, &c., when diseased, by means of auscultation and percussion, contend, nevertheless, that our therapeutics, in affections of these organs, had not been at all improved, by their employment, in diagnosis. They say that, for all practical purposes,

the character and extent of the lesion of these organs, can be sufficiently well made out, by attention to symptoms alone; and hence, that it is useless for young men to waste their time, in acquiring a knowledge of the physical signs. This opinion, however, we have never heard advanced by any one possessing acquaintance with auscultation and percussion. Hence we may safely conclude, that it has had its origin, either in the selfish desire to save individual credit, or else, in utter ignorance of the importance of correct diagnosis.

Were it true, that organic diseases of the heart, lungs, &c., can be detected by the changes of function, there would be some apology for this silly opposition to physical signs. But when it is admitted, even by the purest symptomatologists, that there are no symptoms positively pathognomonic of pulmonary affections, it should not for a moment be tolerated, and we are confident will not be, unless by such as are contented to remain in total ignorance of the only certain means of gaining such information as alone can enable them to treat with success, the various diseases of the chest. And not only will they prove useful in pectoral affections. There is no disease, the diagnosis of which will not be facilitated by attention to them. For instance, if we ascertain positively, that the chest is not at all involved, we limit the number of objects to be observed; or, in other words, we shall, as it were, have travelled over the third of a wilderness, the whole of which has to be explored, before we can determine in what part of it the object of our search lies. In the various forms of fever, affections of the lungs frequently occur, without occasioning any symptoms whatever, to call attention to them. These often prove the cause of death, if not speedily detected and properly managed. Now it is impossible to discover them, except by means of auscultation and percussion; and this fact has elicited from Dr. Stokes, of Dublin, as rational and philosophical a practitioner of medicine as belongs to the present age, the declaration, "that a person ignorant of percussion and the stethoscope, is totally incompetent to undertake the treatment of any case of fever." According to Bouillaud, of Paris, who has given particular attention to the subject, nearly one half the cases of acute articular rheumatism, are complicated either with pericarditis or endocarditis. These affections are both of exceedingly fatal tendency, and require bold and timely treatment. But like the affections of the lungs, complicating fever, they can be detected only by physical examinations. He, therefore, who is unacquainted with auscultation and percussion, is certainly incompetent to treat rheumatism.

These are some of the proofs of the utility of physical signs. We

might go on, almost without limit, to give others of similar character: but we have already said more on this subject than we intended, and surely as much as will be patiently read.

We would not wish to be understood as wishing to undervalue symptoms. Far from it. There is no one, who will more cheerfully than ourself, subscribe to the declaration, that no opinion, as to the seat and nature of disease, should be relied on, until both symptoms and signs have been carefully observed and fairly weighed. They are alike indispensable to accurate diagnosis, and without this latter, therapeutics must ever remain vacillating and uncertain. Let us then bear in mind, that *correct diagnosis* is the only key to rational and successful treatment; and that it is only after due attention to all of the symptoms and all of the signs, that any diagnosis can be safely relied on.

The sources of physical diagnosis, as ennumerated by Dr. Stokes, in his admirable work on the diseases of the chest, are, First. The existence of an external venus circulation. Second. Signs derived from the displacement of the thoracic or abdominal viscera. Third. Signs derived from the inspection of the motion of the thorea during respiration. Fourth. Signs referable to the sense of touch. Fifth. Signs derived from alteration in the shape and volume of the thorax. Sixth. Signs referable to accoustics." These latter embrace the results of auscultation and percussion, and are the most important, because the most certain of all the signs. It is not our part, however, to remark here on the comparative value of the physical signs. Suffice it, that they are to be thoroughly studied, under favorable circumstances, before they can be properly appreciated; and that, after we are prepared to appreciate them, they are all to be carefully observed.

In pursuance of our original design, we ought now to treat of the "method of arriving at general conclusions, from individual facts." But to enter fully into the consideration of this subject, would consume more time and space than we can, at present, devote to it. We will, therefore, merely say, that the *facts*, when a sufficient number have been collected, are to be classified and counted.

This method of counting and classifying cases and symptoms, is known as the numerical method. It is the method which has been so successfully employed by Louis in the study of "phthisis," and the "typhoid affection." By means of it he has given to our knowledge of these maladies certainty, where before were only chaos and confusion. It is the method now adopted and pursued throughout the world, by all who have clear conceptions of the nature of medical science; and by means of it, alone, can *medicine* ever be elevated to a rank amongst the "Exact Sciences."

ART. 2.—*Case of Granular Degeneration of the Kidneys.* By GEORGE K. PARDEE, M. D., of Wadsworth, O.

Reasin Simcock, aged 30, was attacked more than two years ago with pain in the right lumbar region, and frequent calls to empty his bladder, and occasionally with blood discharged from it; under which symptoms he had suffered for some time, and had taken some medicine before I saw him. His condition at this time was as follows, viz: Pain in the region of the right kidney, with a desire to urinate much oftener than in health, being obliged to get up several times in the night for that purpose; urine albuminous, sometimes bloody; derangement of the digestive organs; skin dry, and of a peculiar dingy or bloodless appearance. Patient has been robust and temperate, a laborer, and capable of enduring fatigue, heretofore, without inconvenience.

Treated with mercurial laxatives, a restricted diet, rest, counterirritation, &c. This course in a short time relieved the urgent symptoms, and the patient returned to his usual employment. Very soon afterwards, the same urgent symptoms returned, especially the pain in the region of the kidney, frequency of voiding the urine, and occasional bloody urine. A repetition of the same remedies, with such modifications as circumstances seemed to require, controlled the more urgent symptoms; but there continued a more copious flow of urine than usual, and the patient was compelled to get up five or six times every night to evacuate his bladder. The urine continued albuminous; and there was emaciation, and the exsanguineous appearance increased.

Thus the case alternated for eight or ten months, growing less urgent and severe, when the patient was taking medicine and at rest, and increasing when he resumed active labor.

About this time he had an attack of Dysentery, from which he recovered rather slowly. There was nothing striking in this, (the dysentery appearing in the ordinary form, and yielding to the ordinary treatment,) except that it seemed for a time partially to arrest the disease of the kidney. Very soon, however, after the patient resumed his usual employment, he was compelled to desist, and finally changed somewhat his business, so that he was able to get along with less laborious exercise. There were alternations from worse to better, but the progress of the disease from this time forward was uninterrupted. The emaciation, exsanguineousness, and increased secretion of urine, all progressed; and the treatment recommended by Bright and Christison appeared to produce no beneficial effect.

About eight days before his death, he was seized with pain in the right kidney, extending along the ureter, of the most severe character. The circulation was not disturbed; appetite good; tongue clean. Fomentations and large doses of opium were used, which relieved the pain; but soon there began to be discharged with the urine large quantities of pus, and a soft cheesy looking matter. The stomach became irritable, and in a day or two afterwards there was another paroxysm of pain, for which opium was again prescribed. Pus and the cheesy matter appeared again in the urine, and the patient was seized with a protracted chill, followed by febrile excitement, severe pain in the head, delirium, picking at the bed clothes, and decided symptoms of arachnitis, under which he sunk and died, October 22, 1844. The urine continued to be intermixed with pus and cheesy matter in large quantities up to the time of his death.

### AUTOPSY.

The abdominal viscera were all healthy except the urinary organs. The colon was contracted and contained many cicatrices, the effects of the dysentery. The right kidney was about one third of its natural size; its external surface was irregular and uneven, and instead of its natural, dark, uniform color, it was mottled or granulated. The ureter was four or five times its natural size. On opening the kidney, its substance was entirely changed. There were eleven or twelve cysts, and these occupied the whole of the kidney, containing white tuberculated, soft, cheesy-looking matter; some of them entire, and others communicating with the pelvis of the kidney and ureter; in both of which latter were portions of this softened tuberculous matter, as also in the bladder. The left kidney was enlarged, but not otherwise altered in its external appearance. On cutting it open, it contained some small tubucles about the size of small peas; the ureter was also dilated; bladder somewhat contracted. The brain was in a normal condition; the arachnoid was injected, and covered with lymph, and pus was effused upon portions of its surface; the dura mater was also healthy.

### REMARKS.

This case presents some points worthy of especial notice. First.—*Its well marked character.* Who that has read Bright or Christison on granular degeneration of the kidneys can fail to recognise this as a peculiarly well marked case? The symptoms were unequivocal. The pain in the lumbar region, *exsanguineous appearance of the patient, albuminous urine,* and *being obliged* to *get up several times in the night to evacuate the bladder,* all were *characteristic of this disease.* The

bloodless appearance is regarded by the writers above referred to as the result of the continued elemination of the albumen of the blood; thus as effectually impoverishing it as if there was a daily abstraction of blood from the vessels themselves.

Second. The duration of the disease. This case was of two years standing, and it is worthy of consideration that the patient might have lived many years longer if the sound kidney had not taken on the same diseased action. This appears to have been of quite recent character, and no doubt gave rise to the arachnitis, as a secondary effect. Is the extra burden thrown upon the sound kidney calculated to develope the same disease? Or is it a constitutional malady with which the whole system is tainted?

Third. *The paroxysms of pain.* These were produced by the passage of the tubuculous matter through the *ureter;* and may we not suppose, that the recuperative energies of the system would have been sufficient to have rid itself of the whole of this unorganized matter, contained in the one kidney, if the other had remained sound?

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ART. 3.—*Case of Rupture of the Spleen.* BY J. B. POTTER, M. D., *of Canal Winchester, Ohio.*

Andrew Kris, æt. 35; German: Occupation, weaver; of good habits, and (with the exception of five or six paroxysms of intermittent fever, about twelve months previous,) uninterrupted health.

On the 16th July, 1844, was attacked with slight fever, and mal aise, but not sufficient to confine him entirely to his room; continued in this condition, until the morning of the 20th, when he remarked he would be able to resume his labour by the 22d; appetite, which had previously during his illness been poor, good; ate freely of "soup." About 3 P. M., complained of severe pain in the "stomach and belly," followed in a few minutes with vomiting of the contents of the stomach, immediately after which he said his "belly would burst," and that he was dieing. Expired at 5 P. M.

The above history, was gathered from the friends, as he was attended by a quack, of the witch breed, who, by hocus pocus, tried to cast out the fiend. This, with "one or two doses of pills," constituted the treatment.

Autopsy 22 hours after death. Present, Drs. Minor, Talbott, Highlands, Eels, Bywaters, L. A. Clark, A. Clark, Hunt, and Potter.

Finely developed muscular system, rather corpulent, brain and mem-

branes, lungs and heart, in a normal condition. On opening the abdomen about half a gallon of venous coagula was found, which proceeded from a rupture about 1½ inches long, on the inferior portion of the capsule of the spleen, the parenchymous structure of the spleen, was entirely broken down and destroyed, constituting a grumous mass, so soft as to be easily washed away, stomach and bowels normal, liver slightly enlarged and congested.

This case seems important, as it adds another to the number of cases demonstrating the rapidity with which the spleen may become softened from active inflammatory action, and the small amount of constitutional disturbance, at least *sometimes*, produced, before it proceeds to a fatal termination. It has been suggested that cases of this kind "may proceed from some acute inflammatory action and slow softening." I think such was not the fact in the above case, as the subject had been in robust health, during at least the previovs 11 months, and had been actively engaged at his loom. Respectfully, yours, &c.,

J. B. POTTER.

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Art. 4.—*Insanity cured by excision of the external organs of Generation.* By Saml. N. McMinn, M. D., of Tuscaloosa, Ala.

I was called to see Mrs. B., fifteen miles into the country, and was told by the messenger, to use his own language, "that she had been crazy for several years, and now had ruined herself with a razor." I found her visage bloodless, and pulse at the wrist almost imperceptible. Upon further examination I found her floating in blood. She had procured a razor, and secreted herself, and commenced an operation upon her own body, as it appeared, by making a horizontal incision above the pubis, about four inches in length; then intersecting this, two other incisions one on each side downward on the inside of the thighs, so as to include the whole of the external organs of generation, and terminating the process by amputating or exsecting the whole of the external organ. The wound was so deep as to lay bear the os pubis, and wound, or perhaps remove, the external portion of the urethra and vagina. Taking into consideration the great loss of integument and blood, the necessary irritation of the urine passing over the raw surface, I thought it likely she would die. I dressed the wound with the most simple dressing, and ordered a dose of castor oil in the evening, if the bowels were not moved. During the whole time of my stay on the first visit, she was talking incessantly and unintelligibly.

I learned from her friends, that about six years previous to the above date, when she was about forty-two years of age, she ceased to menstruate; and a few months afterwards became deranged, and had remained so ever since. In consequence of her derangement, her husband had abandoned her, and had not lived with her since.

The next day I visited her again, and found evident marks of returning reason. Her mind continued to improve, and in about three weeks her reason was perfectly restored. In about four months the wound ompletely cicatrized. From that time to the present I believe she has enjoyed the right use of her reason and good health; and she and her husband live together in peace and good order.

I am pleased to call the attention of the profession to this case, as I presume there are a number of just such in existence. And the results of this case may suggest a remedy. Whether it was the great loss of blood, the removal of the external organs and the counterirritation consequent, that cured the patient is a question for the consideration of the profession. I have had the opportunity of making examinations in three different cases which I presume are quite similar to Mrs. B.'s, since her case occurred to me; and in each case I found the external organs of generation tumified, indurated and issuing a serous, acrimonious, and quite offensive fluid, indicative of considerable disease in the parts. But whether this condition of the organs existed before mental aberation was evident, or had set in at a later period, I am unable to determine.*

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ART. 5.—Dr. C. J. B. WILLIAMS's *Lecture on Dyspepsia.*—We have now to consider the subject of *dyspepsia*, or, as it is commonly termed, *indigestion.* You will find this state described under different forms, and arising from two opposite conditions; in one, from the stomach being too empty, and in the other from its being too full. The three chief varieties of dyspepsia, according to practical men, are: first, disorder of the function of the stomach, chiefly of an inflammatory kind; secondly, the atonic species, which is connected with a great degree of weakness in the organ, and in the function connected with it; and, thirdly, the irritable kind, that in which the nervous system is greatly

* It was subsoquently ascertained, that this woman enjoyed the usual venereal excitement after the operation; and as the *clitoris* was removed, it would conclusively prove, (if proof were necessary) that the excitement does not reside in that organ.

excited, and the various symptoms which take place are of the nervous character. These three varieties, the inflammatory, the atonic, and the irritable, sometimes occur in a manner so distinct, as to justify the division which has been made of them; but in many instances you find these different varieties run into each other, or become perfectly combined. Thus, for instance, the atonic variety usually arises from the food taken being either too hard to be digested, or the stomach being too weak to act upon it. But, if this continues long, the food acts as an irritating mass, and excites, not merely irritation or disturbance, but even inflammation, and thus the inflammatory form of dyspepsia becomes superadded. This is not at all an uncommon combination. Again, the inflammatory form of dyspepsia in nervous subjects sometimes passes into the irritable; that which is at first inflammation, often becomes, in nervous subjects, a sort of neurosis. Severe gastrodynia commonly occurs in the commencing stage of inflammatory dyspepsia. Still, however, making all these allowances, it is better in a practical point of view to group the different causes of indigestion into three classes: chiefly because the different forms require different treatment.

Firstly, the *inflammatory form:* this is a low degree of the sub-acute form of gastritis, in which there are symptoms of a low inflammation of the stomach; and this is particularly excited during the digestive process. The sensations complained of are: more or less heat, pain, and tenderness, chiefly at the epigastrium, or referred to the sternum; this is mostly felt after taking food. There is thirst, and the tongue commonly exhibits a red aspect, especially at the margin and tip, and the papillæ are elongated; it often happens that the tongue is white and furred, and sometimes it is smooth and red, with a tendency to be dry; again, it may be glazed, as if it had been stript of the epithelium which covers it; sometimes, it is smooth and dry in the middle, and furred on the outside. I have seen ulceration of the tongue in this variety of dyspepsia. The fauces, too, in this disease, are very frequently red, and the uvula is somewhat elongated. There is sometimes slight inflammation about the whole mouth, and the lips are parched and dry. The bowels are commonly confined, and, in most cases, there is, with this irritation of stomach, a tendency to vomiting. The urine is high-colored and scanty, sometimes depositing a considerable quantity of lithic acid. Thirst, and a slight amount of feverishness, come on during the periods of digestion; the skin is dry and hot; acid perspirations may take place at night, and the pulse is quickened; the circulation, though accelerated, is weak; the feet are cold, and headache is often complained of. These different symptoms are increased

on taking food, more especially stimulating aliments, or hot drinks. Under these circumstances there may be an unnatural pulsation at the epigastrium, and pain, not only at this point, but likewise extending to the right or left hypochondrium, and the region of the heart, as well as the back, and the left shoulder-blade. The temper is commonly observed to be remarkably irritable, more particularly after meals, this being the period of the greatest discomfort. This variety is not so commonly accompanied by sour eructations and accumulation of wind, as the atonic form. It is apt to be attended by a disordered condition of the skin, and erythematous eruptions sometimes show themselves. Now, when these symptoms, which I have been considering, have continued long, and the strength has become greatly impaired, they are apt to pass gradually into those of chronic gastritis; in fact, organic disease appears to be a frequent result of the long continuance of inflammatory dyspepsia.

The chronic form constitutes one of the varities of hypochondriasis. The causes of this form are sometimes merely temporary, such as excesses of diet, especially stimulating food and liquors. It is not uncommonly produced by excessive indulgence in stimulating liquors, especially by those who are not accustomed to them; and it is produced, likewise, by some of the common causes of inflammation. Hot drinks, in excess, have been known to produce it; and, sometimes, the sea air will bring on an attack of gastritic dyspepsia. Irritating medicines, too, have a similar effect in some cases. It is apt to occur in persons of plethoric habits, and not uncommonly in hysterical females, or in connection with amenorrhœa. This disease appears to be a kind of sub-acute inflammation. During the period of digestion, there is a greater flow of blood towards the stomach, than at other times, and this species of congestion, day after day, during the digestive process, keeps up the mischief.

The *treatment* is the same as for the slighter forms of inflammation: and, in a plethotic subject, it may be necessary to draw blood; but, as it commonly happens that the chief pain and discomfort are referred to the epigastrium, leeches, poultices and sinapisms, may be all that is necessary, where the patient is too weak to bear a great loss of blood; and these may be applied to the pit of the stomach, during the process of digestion. Internal medicines are of considerable efficacy in relieving this tendency to excessive inflammatory congestion. Small dose of mild mercurials, once or twice a day; hydrarg. cum creta, or blue pill, combined with narcotics, such as henbane or hemlock, followed by small doses of castor oil, are of considerable avail in unloading the ves-

sels of the stomach and the intestines; besides drawing off the excess of blood in these parts, they fulfil another indication—that of keeping the bowels in a moderately loose state. It is likewise necessary to moderate the action of the stomach, with cold drinks and alkaline solutions, and, if there be a nausea or a tendency to severe pain, hydrocyanic acid may be added, with benefit, to the saline solutions. Mucilaginous drinks are useful in the same way; and iced or cold water, sipped frequently, is likewise of great utility. Sometimes, it is necessary to employ these during the digestive process, and sometimes before meals; or even the first thing in the morning. It is of the greatest consequence, in the treatment of this variety, to regulate the diet strictly, and to avoid stimulating food and drinks. Mild, farinaceous food, gruel, arrow root, sago, tapioca, &c., varied from time to time, sometimes in a more solid, and sometimes in the gelatinous state, and occasionally light puddings, may be given. For drink: barley-water, soda-water, toast-water, or whey, answers very well. It is always necessary, in these cases, to attend to the general health; there is generally a weak circulation, and the great object is to improve it. The patient should use constant exercise, avoiding cold winds, and taking care to clothe the body well. In chronic and old-standing cases, where the patient gets tired of medicines, considerable advantage is derived from sulphurous and saline waters; those of Harrowgate, and some other places. When the patient begins to be convalescent, he should gradually return to the use of animal food, taking care never to over-proportion its quantity or quality to the powers of the stomach: the return should be very gradual, indeed, to the use of stimulants.

The next variety is the *atonic dyspepsia*, called also, *asthenic*, and which is attended by a loss of power in the stomach. The loss of power comprehends several kinds; there is not only a loss of muscular power, but a loss of functional power, from deficiency in the secretion of the gastric juice; and there is, also, disorder in the mucous secretion of the stomach. The symptoms of these cases are: frequently, loss of appetite; loathing and even nausea, or vomiting; the appetite is sometimes capricious, there being great craving, and still, at the same time, when the food is taken, there is a sense of great discomfort, with nausea and perhaps vomiting. There is also a feeling of weight in the stomach, and this organ cannot digest what is taken; there is, moreover, a feeling of distension after eating, obviously arising from flatulence. There are eructations, not only of gas, but also of solid matter and liquids, generally sour, though sometimes tasteless, and even saline. Muriatic and acetic acids mostly abound in these secretions from the stomach.

The eructations that take place after eating very commonly contain acetic acid, and, in that case, a kind of fermentation takes place. Sometimes, the eructations consist principally of water, or a watery saliva, and diluted mucus. The *waterbrash* is of this kind. Often there is a bad taste, and a disagreeable smell in the mouth; and sometimes the mouth is lined with a fur, which is very fœtid and offensive. These varities of bad taste may occur chiefly after eating, but in some cases they are perceived when the stomach is empty. Sometimes eating removes a great deal of it. The tongue, in this variety of dyspepsia, is considerably altered, though not exhibiting the dark redness of the last kind; it is furred more or less, and covered with a thin whitish coat; frequently it is much swollen; the breath is often fœtid, and the bowels are commonly costive; the urine is high-colored and disordered: it is scanty and turbid, and sometimes loaded with urea, while, at other times, it is very clear; sometimes, there are phosphatic and other deposits found in it. The pulse is weak and usually accelerated; the extremities are cold, and the skin very moist, perspiration being easily produced. There is, commonly, more or less headache, vertigo, and an indisposition to exertion; in fact, general languor of the body and mind.

Now, this form of dyspepsia is usaally connected with great debility of the stomach, and of the system generally. It occurs in cases of general weakness, where there is a state of anæmia. Sometimes, however, this affection is entirely local. Thus, for instance, a person who has had a surfeit, in whom the stomach is habitually weak or irritable, after taking too great a quantity of food, may have an attack of this species of dyspepsia, with many of the symptoms I have been describing. Very poor living, long continued, is apt to produce a similar effect. Hence, we find this kind of dyspepsia commonly occurring among the lower orders. Sometimes, too, frequent irregularities of diet, more particularly in persons of weak constitution, engender this form of disorder. It occurs most commonly in persons of weak and relaxed habits, as well from the causes I have mentioned, as from indigestible food ill-adapted to the capacity of the stomach of the individual; and very slight causes will excite it again and again. Persons of very sedentary habits, who are closely confined in bad air, or are accustomed to intense mental application and great mental anxiety, thus exhausting the vital energies, are found to be very subject to this kind of dyspepsia. Circumstances which weaken the circulation, and long-continued neglect of the function of the lower part of the intestinal canal, are apt to promote the occurrence of these attacks.

You will, therefore, understand that this disease is essentially a weakness of the stomach as a muscular organ, but, more particularly, as an organ of secretion and digestion. The secretions of the stomach are, sometimes, imperfectly mixed up with the products of the disordered digestion. A variety of this kind has long been known under the name of pyrosis, or waterbrash: is one of the varieties of diseased secretion, and is characterized by eructation of liquid. I need not consider it as a separate variety, because it is but one of the symptoms occurring in atonic dyspepsia. Sometimes this secretion takes place in such quantities as to merit the term of flux. Waterbrash occurs very frequently among the poor Scotch and Irish, who live on potatoes and porridge, and in others who are of a lax habit, and get their stomachs disordered from a variety of causes. Now, with regard to the *symptoms* of this affection: it may present itself under an acute form, and these acute attacks depend less on the permanent weakness of the organ, than upon the effect resulting from some recent agent; as, for instance, on some surfeit of food, or food of an improper character. Under these circumstances, when the stomach is very much disordered, and the tongue is greatly furred, much benefit is often derived from the exhibition of an emetic, which gives a stimulus to the stomach, clearing away the diseased secretions, and altering them in character. By this means, the stomach is enabled to recover its healthy tone. Purgatives are often useful, more particularly the bitter kinds, which are tonic to the stomach, and, at the same time, act as aperients to the canal below it. For instance, rhubarb and aloes, combined with magnesia and alkalies, are very useful. In anæmic cases, iron is the great remedy. There are, however, particular symptoms to be treated in indigestion, that are met with, perhaps, from time to time only. For instance, flatulence and heart-burn, when they occur, are commonly subdued by aromatics: as peppermint, sal-volatile, or æther, in combination with liquor potassæ, carbonate of soda, or magnesia. All these antacids and carminatives tend to counteract the flatulence. Nausea and bad taste are greatly relieved by mild salines: citrates of potash and soda, or tartarized soda; or some of these salines may, in certain instances, be combined with aromatic waters. I have occasionally found advantage from combining them with creosote. Seltzer water is also serviceable in these cases. In waterbrash, the nitrate of bismuth, given in doses of five to ten grains, with gum mastic and sugar, is a good remedy; and, if there is acidity, calcined magnesia may be combined with it. In case of nausea being present to a great degree, hydrocyanic acid may be given with much advantage. But, the most important point in

the treatment is, to give tone to the stomach, to allay its excitability, and to get into proper action its secretory function. Now, this is done, perhaps, more effectually by diet and regimen, than by medicines; nevertheless, I have found tonic remedies often render very great aid. Dieting the patient is of great importance, and the stomach should have a proper degree of rest. Weak organs are not benefitted by total rest, though, of course, they are diseased by too much exertion; the exertion should be moderate. It is, therefore, of the greatest consequence in the treatment of atonic dyspepsia, to give the meals at stated periods and fixed hours, keeping carefully to those hours, and taking care that the individual gives sufficient rest to the stomach and the whole system, to enable the digestive process to go on as favorably as possible. The stomach is to be, in a measure, coaxed to do its proper work. In atonic dyspepsia, instead of gruels and slops, you find some solid food agrees better, and you may commence with animal diet, in small quantities, with a sufficient mixture of farinaceous food: bread, not too stale, nor yet too raw, and a little rice exceedingly well boiled. Rice should not be boiled in a cloth; that is a complete perversion of a very useful vegetable. A little cauliflower, and maccaroni, may be taken. The lean of a mutton chop, or a slice from a joint, when hot, often agrees very well, and may be readily digested, where more would cause a severe fit of indigestion, and where slops, or broths, &c., would but increase the malady. If this is not sufficient to sustain the patient, a meal of this kind may be made twice a day. Sometimes, meat at breakfast, either with tea or coffee, in moderate quantity, or even with cold water, is a good plan of diet. A stimulant is often very useful, and a little weak brandy and water may be given, but the quantity of liquid should not be considerable. Dyspeptics should dine at very regular hours; taking breakfast at eight or nine, dining at one or two, and introducing, between dinner and the next solid repast, a liquid meal, consisting principally of weak tea, and eating very little with it. A biscuit and a glass of wine answer very well between meals. It is a great mistake to suppose that the patient must be absolutely starved. You must draw out the powers of the stomach, by means of diet and remedies, taking care to avoid fresh causes of indigestion. It is highly beneficial to promote the general strength and health, by exercise of a moderate kind in the open air, but not immediately after meals. An hour or two after breakfast, and after dinner, exercise should be taken, but not to so great an extent as to produce fatigue. Lastly, the medicines should be of the tonic class: columba, cascarilla, and gentian, combined with alkalies, or mineral acids, whichever are found to suit best; for, a constant rule cannot be

laid down. It is of the greatest consequence to ensure regular evacuations; and if the tone of the stomach is not restored by the plan of diet before alluded to, it is much better to take some gentle saline aperients. In many instances, it is necessary, where the patient will not submit to diet and regimen, to resort to mineral or saline waters. The chalybeate waters of Cheltenham, and Tunbridge Wells, are very often useful.

*The irritable form of dyspepsia* is known by various names: such as, cardialgia, gastrodynia, gastralgia; it is a morbid sensibility of the stomach, with nervous dyspepsia, and presents chiefly the following symptoms: pain, uneasiness, and unpleasant sensations, referred to the stomach, the sternum, the left side, and the back, sometimes radiating to the arm, and occurring mostly after food; but in some few instances, without taking any food at all. In these cases, although there is a great amount of pain and constant tenderness at the pit of the stomach, there is no increased heat of the skin, nor is the pulse quickened to any considerable extent. The pain is frequently relieved by pressure, and by hot liquids, or various circumstances which would exaggerate the symptoms of the other forms of dyspepsia. The pain is sometimes very severe, coming on in paroxysms, affecting the back and the chest, constituting gastrodynia and gastralgia, in its highest degree, and sometimes, also, occasioning difficult breathing. At times, there are nervous symptoms, and pain in individual parts—sympathetic irritations: as, palpitation, asthma, cough, pains in distant organs, cramps, twitchings of the face and lips, and so forth. Here, we have the nervous sensibilities called into action by the imperfect function of the stomach. There is, sometimes, connected with this form of dyspepsia, great mental depression and even despondency; and the more intense form of this disease constituses hypochondriasis, or melancholia: in the one case, the patient describes his symptoms with tedious minuteness; while, in the other, the spirits are greatly depressed, and the individual is unable to refer his complaints to any particular organ. The appetite, in this variety of disease, varies: sometimes it is most enormous, and, occasionally, the patients fancy they can eat all sorts of unwholesome things. The pulse varies very much. The tongue is clean, or else there is a thin fur upon it. The patient is often very tremulous, and there is but little thirst. The bowels commonly are costive, but the evacuations are not disordered in appearance. The urine is generally copious, as in many other nervous affections; sometimes, however, it is rendered turbid by a deposition of the phosphates. The causes are those of indigestion, affecting nervous subjects, especially in such as labor under nervous symptoms in other parts. There are often found, in connection with

this state, symptoms of spinal irritation, and tenderness in the situation of the middle or lower dorsal vertebræ. This variety may run into the other forms.

Now, the *treatment of this affection* is much the same as for atonic dyspepsia. Nitrate of bismuth, and hydrocyanic acid, are useful where gastralgia is present; when the nervous sympathies of the stomach (as palpitation, &c.) are exalted in a high degree, narcotics, such as stramonium, belladonna and opium, are very serviceable. In a less degree, alkalies are useful, particularly liquor potassæ and lime water. Mustard poultices give great relief. As more permanent remedies, to deaden the nervous sensibility, nitrate of silver, or sulphates of copper and iron, in various proportions, are found to be of very great efficacy. It is of great importance, in these local nervous diseases to improve the general health and the tone of the vascular system, by taking exercise in the open air.

Now, there are some analogous affections to these, occurring in the duodenum, and which require a little consideration. When they are combined with the affection of the stomach, the symptoms presented by the latter are somewhat modified. There is, sometimes, disorder of the liver, and of the hepatic system, and there exists pain to the right of the epigastrium, and uneasiness felt after food. The faces are apt to be discolored, and the secretion of bile is more or less wanting. The appetite is, in some cases, good, and there may be no uncomfortable sensation immediately after eating, but it is felt two or three hours subsequently. There is seldom much fever present in this variety of duodenal dyspepsia. There is headache and vertigo, and sometimes giddiness and faintness are felt. If this disorder continue long, it is apt to produce cough, palpitation, jaundice, and disorder of the secretions generally. The urine then becomes thick and high colored, and tinged with bile; the tongue is furred and of a yellowish tinge, and often presents a patchy appearance; sometimes there is vomiting, and the skin exhibits a morbid aspect. This disease occasionally leads to tuberculous cachexia, from the imperfect action of the liver, and subsequent disorder of the general system. The causes of this, and other similar affections, are: bad and indigestible food, passing into the duodenum in an undigested state, and there causing irritation; hurried eating; and acute attacks if duodenitis. These attacks are not uncommon in persons of sedentary habits.—[London Med. Times.

ART. 6.—*Tobacco—its effects in producing certain Diseases.*—In the year 1837, my attention was called to two cases of disease in the same family. The symptoms and phenomena attending them were so similar, that it struck me at once that they had a common origin: The first was that of a young gentleman, D. W., a student of law, of a nervo-sanguine temperament. He had been a martyr to dyspepsia for two or three years. He had spent a year in the Western States, and had attended the Law Lectures at Cincinnati. While at the West, he had acute ophthalmia, which was treated by active depletion with little benefit, as his eyes, when I first saw him, were highly injected, cornea vascular and semi-opaque, and the lids granular. He applied to me for the treatment of his eyes, but what most afflicted him constitutionally was low spirits, want of resolution, and general hypochondriasis. His stomach would receive food with a good relish, but the moment he had finished his meal, a train of nervous symptoms came on, which harassed him for hours, until the stomach was empty. Acidity, cardialgia, gastrodynia, palpitation of the heart, giddiness, vertigo and fulness of the head, with the most profound gloom, and, keenly alive to every feeling, he was in constant fear of death, yet tempted to commit suicide to escape from a life more intolerable than death itself. These symptoms harassed him for months, with varying degrees of intensity, when a new symptom arose, which terrified him more than all the rest. His sleep had been broken by the most horrid imagery in the shape of frightful dreams, for more than a year; but now, when the first hour of sleep came over him, he was suddenly awoke by a shock in the epigastrium which started him in great alarm from his sleep. These shocks and startings were repeated several times in the course of the night, and as often as he fell into a slumber. They were at first confined to the epigastrium, but after a few weeks the sensation was transmitted to the head, which he described as more unendurable than when confined to the epigastrium. It was followed by a sensation as if a rush of blood took place to the head, and a firm conviction in his mind that he should die with apoplexy. This impression preyed upon his mind incessantly.

I was often summoned in the night in great haste, and found him agitated, with cold sweats, palpitation, and terrible apprehensions of immediate death. A little soothing encouragement, a dose of morphine and carbonate of ammonia, would dispel his fears and quiet his agitation, and enable him to rest the remainder of the night with tolerable composure. This state of things lasted several months, during which time he was not in a condition to pursue any kind of business, and find-

ing that medicines only gave him temporary relief, I suggested to him that tobacco might have some agency in his complaints (as he used it freely, by smoking, chewing and snuffing,) and advised him to abandon the habit. In this I was successful so far as chewing and snuffing were concerned; but he was so attached to his cigar, that it was a long time before he could be induced to leave that. I will add here, that from the time he left the habit of chewing and snuffing, his health in some measure improved, particularly the shocks and epigastric sinking. He now became satisfied that his partial abandonment of the habit had been productive of good, and renounced the habit entirely; and the nocturnal shocks and epigastric sinking, with the whole train of nervous affections, vanished as if by magic. His digestive powers gradually improved; the chronic inflammation of his eyes yielded readily to appropriate treatment; the gloom and despondency which had oppressed him as an incubus, cleared away; the nervous palpitations and rushings of blood to the head subsided, and he was able to prosecute his studies with energy, was admitted to the practice of law, and is now an able and talented member of the bar, in the possession of good health, spirits and prosperity. The foregoing history I copy from my notes taken at the time. There were many other symptoms which are common in dyspeptic cases, and many of those described are found in every-day practice in nervous dyspeptics and hysterical habits. The sudden and complete cure of all the symptoms on leaving off the use of tobacco, was too obvious to escape the observation either of patient or physician.

I will now briefly allude to the case of a sister of the gentleman whose case I have been describing, although not occurring in the order of my notes. She was married, and the mother of two children; her age 39; dyspeptic for the last ten years; of a nervo-sanguine temperament; her youngest child 10 years of age. Suffered since her last accouchment from leucorrhœa, partial prolapsus uteri and hypochondriasis. Has smoked and snuffed tobacco for fifteen years. Eight years ago began to have shocks at the epigastrium, with a sinking sensation at the pit of the stomach, cardialgia, acid eructations, a sense of rushing of blood to the head, palpitations, sleeplessness, and startings when first falling into slumber. These kept increasing upon her, when there came on tenderness of the spine along its whole length, but more especially in the cervical and lumbar regions, rigidity of the limbs, costiveness, derangement of the catamenia, &c. She has been under treatment for a long time, with little or no benefit. To soothe her feelings, she had taken more freely of snuff, and had smoked more often, as she fancied that it gave her temporary relief. Seeing the good effect from abandoning the

use of tobacco in her brother, she made the same experiment in part herself, and with the same marked relief from many of the symptoms. The shocks at the epigastrium left her, sleep became quiet, her mind more cheerful, and the epigastric sinking, cardialgia, acidity and eructations were greatly relieved. The spine, however, required cupping and counterirritation, and with the use of anodynes and tonics she recovered a comfortable state of health. This patient has frequently ventured upon a moderate use of tobacco since, but after using it awhile she experiences, though in a slight degree, her old feelings, and then quickly abandons it. She is perfectly satisfied of its pernicious influence upon her constitution, and therefore is in little danger of carrying its use again to excess.

S. E., æt. 40, was in possession of good health until 1838, when he began to emaciate and grow pallid, his food did not digest well, acidity, heart-burn, gastralgia, palpitation of the heart, sinking at the pit of the stomach, and a host of nervous symptoms; gloom, hypochondria, and apprehensions of sudden death. But what most amazed him, and which filled his cup of misery full, was shocks at the epigastrium, which attacked him when first falling asleep every night. These followed him two years, and increased to such a degree that his sleep was a succession of starts, which nearly wore him out. At the end of two years they came upon him during the day. He described them as like shocks of electricity, and confined to the epigastrium. He was incapacitated from business of any kind, was weak, irresolute and desponding. Had consulted many physicians, and taken a great variety of medicines, with only temporary relief. On his giving me a history of his case, I was struck with its similarity to that of D. W., and inquired if he was not in the habit of using tobacco. He stated that he was, and had sometimes imagined that it might have some agency in producing some of his bad feelings, but had never had any physician advise him to leave it off, and in reality was too much a slave to its use to lightly make the sacrifice. Upon my assuring him that the symptoms and disease depended upon the habit, and that nothing but a complete and total abstinence from it would restore him, I extorted a promise that he would lay it aside a month at least. As he was costive, I prescribed the compound syrup of rhubarb, and directed him to call again in a month. At the end of that time I was agreeably surprised to witness the improvement in the appearance of my patient. His countenance, which had previously exhibited a sallow, pallid aspect, was now ruddy with health and strength; he had gained fifteen pounds of flesh in the time, and his strength had increased daily from the time I last saw him. But what

to him was more than all the rest, the annoying shocks, with the general nervous agitation attending, had entirely left him from the third day of his abstinence from tobacco. The dyspeptic affection, the palpitation, the gloom and depression of spirits, the apprehensions of death, had vanished as if by enchantment. He had resumed his business (that of a farmer;) he could now sleep quietly through the night, and get up in the morning refreshed and buoyant in spirits, and is so convinced that tobacco was the root of all his previous complaints, that it requires no advice to induce him to forever refrain from its use. This man has now the most perfect health, and has taken no medicine since the first month.

C. P., æt. 43; nervo-bilious temperament; farmer; temperate; has been a tobacco chewer for twenty years; has been dyspeptic for ten years, more or less, attended with nervous palpitation and acidity, hypochondriasis and epigastric sinking. First began to have shocks at the epigastrium in 1839, in the night on first getting asleep, which started him up in great agitation and alarm; was frequently obliged to get up and sit, for fear of the shocks. On his consulting me, I advised him to discontinue the use of tobacco, and prescribed no medicine. He left it off, and the shocks immediately subsided. He did not resume the use of tobacco again for eighteen months, and was healthy during the time. Being of an irresolute disposition, he resumed its use again, and in two months the shocks began with great severity. They were now felt in the chest and region of the heart—at first always in the night, but after awhile in the day-time, with a rushing of blood to the head, which would momentarily deprive him of consciousness. The shocks now took place in the head. This so terrified him that he earnestly besought me to prescribe something for him, and agreed to abide my advice. My opinion was, that no medicine would be of the least service without a complete abandonment of tobacco. This he solemnly promised he would do. I prescribed the compound syrup of rhubarb, with the ammoniated tincture of valerian. The shocks at once left him, his sleeps became quiet, his dyspeptic symptoms disappeared, his mind became calm, spirits elastic, and he was capable of working his farm. Two or three times since, he has cautiously ventured on the use of tobacco, but after a certain length of time his old feelings begin to appear; so that it is reduced to a demonstration that tobacco was the sole cause of his former troubles. This man has increased fifteen lbs. in flesh, and his color, from being sallow and pale, is of a ruddy hue.

S. C., æt. 63; farmer; robust and healthy, until four years ago, when he began to complain of epigastric sinking, sleeplessness, palpitation, irritability and nervous tremors. Shocks at the epigastrium came on at

the first hour of slumber, which were repeated several times in the course of the night, and often in the morning before breakfast. Has been a tobacco chewer thirty-eight years, and a portion of the time to great excess. On his consulting me, I suggested that tobacco was the agent in all the trouble which he experienced. He said he had often suspected it, but had never had fortitude and resolution to forego its use, but agreed to make a trial. The shocks immediately left him, together with all the train of nervous affections; his sleep became calm, his strength and flesh returned, his spirits improved, and he has gained twenty pounds of flesh in three months. He has not resumed the use of tobacco. This man was temperate in all things except tobacco, neither using tea or coffee. He was sensible for years that something was wrong, but could not believe that an article in such universal use as tobacco, and one which he had used for a long series of years, could possibly cause his troubles. This, I am persuaded, is the case with hundreds, who are similarly situated.

S. J., æt. 54; nervous temperament; farmer by occupation; has been in the habit of using tobacco for ten years. It frequently has salivated him. He spits much, is emaciated, nervous and hypochondriacal. The shocks commenced about two years ago in his bowels. They came on in the night, when first getting into a drowse; at length they came on in the day-time, with epigastric sinking, costiveness, and general dyspepsia. I put him on the use of the compound syrup of rhei and ammoniated tincture of valerian, and at the same time he left off the use of tobacco. The shocks immediately left him, and he improved gradually, so that at the present time he is in comfortable health.

A. C., æt. 27, is of a sanguine temperament, and robust habit; a farmer by occupation. Has chewed tobacco for four years to excess. Was taken in the summer of 1841, suddenly, with sinking at pit of stomach and faintness, which obliged him to lie down in the field. Shocks at the epigastrium came on about the same time. These were first at night, on getting asleep, but after awhile in the day-time; at these times he would suddenly break out into a profuse perspiration. His digestion was tolerably good, and his health otherwise little impaired. He says that previous to these symptoms he had used large quantities of tobacco, but never imagined that it could hurt him. I advised him to immediately discontinue its use, which he did, and the shocks and faintness left him at once and have never returned. This man took no medicine.

Rev. Mr. H., æt. 30; of a nervo-sanguine temperament; addicted to the use of tobacco fifteen years. For many years he was troubled with

epigastric sinking, and lately with shocks in the same region. He is in tolerable health in other respects, and but for the annoyance which they occasion him when first getting asleep, would not think of asking medical advice. I recommended him to quit his tobacco, which he did, and a perfect cure was the result.

J. S., æt. 40; of a nervo-bilious temperament; followed the sea many years; commenced smoking for spitting up his food. Soon commenced chewing, and carried it to excess, often using a pound a week. Five years ago began to feel a sinking sensation at the pit of the stomach; then starting from his early slumbers, with a shock through the epigastrium and sometimes chest; a rising sensation, like an aura, to his head. Oppression at the chest great, and sudden difficulty of breathing, palpitation, choking, sudden faintings, unquiet sleep, frightful dreams, dyspepsia and hypochondriasis. From being strong, robust and resolute, he became weak, nervous and timid. In this condition he applied to me for advice. It was with much difficulty that I could persuade him to quit his tobacco, and when he attempted it he was often a backslider. But soon he perceived the good effects, and was at length induced to lay it entirely aside, and with it went all his former bad symptoms. I have since ascertained that he was somewhat addicted to the use of ardent spirits, which may have contributed in a measure to some of the complaints.

REMARKS.—I might multiply cases that have fallen under my observation, to demonstrate the fact that tobacco is capable, in certain constitutions, and under certain circumstances, of producing a specific set of phenomena which are peculiar and pathognomonic. All the symptoms are more or less attendant on dyspepsia, hysteria and hypochondriasis. But the shocks at the epigastrium are so prominent a symptom, and so uniformly felt when tobacco was abandoned, as to constitute a striking peculiarity. The habitual use of any narcotic is liable to produce derangement of the digestive organs, and through that a long train of nervous derangements, which baffle the skill and tire the patience of the physician. The digestion once impaired, the great nervous or ganglionic system takes on a chain of sympathies, which are often at a distance from the first organ affected.

The habitual use of tobacco, when not carried to excess, does not produce disease, and perhaps we may say that it does not generally do so. From the nature of the substance and its peculiar narcotic properties, an individual cannot start off at once on a free and liberal use of it. Nature has so fashioned us, that when we transgress her bounds (especially in reference to tobacco) we are reminded, by nausea, of the extent

we are allowed to go. If it were not for this, how many would destroy themselves before a habit could be formed, rendering its employment so safe that large quantities can be taken almost with impunity. It is the same with all narcotics. Opium, for instance, can be taken, if a habit is once established, in immense quantities, and apparently with little harm. Still, there are constitutions that have long held up under the use of narcotics, that will receive gradually and almost imperceptibly an injury which nothing can remedy so long as the pernicious habit is persisted in. This is emphatically true as regards the use of tobacco. The martyrs themselves little suspect the secret enemy that is sapping the foundations of health and life. They have been accustomed to it, perhaps, from childhood. Their grandfather, father and brothers have used it before them. They never heard a word spoken in disparagement of it, and their own inclination is a powerful advocate for the pernicious article. Perhaps, too, their physician has spoken a good word in favor of their common friend, which has done much to establish it still stronger in their good graces. They may, however, now and then have some misgivings, as they lay awake night after night, taking an inventory of their wretched feeling; but this is laid to the charge of dyspepsia, or the wear and tear of business, until finally they ascertain the true cause, or some acute malady comes to their relief, which, while it lasts, compels them to abandon (for a while at least) the article, while nature re-asserts her violated laws.

As a general rule, those who use tobacco to excess are much troubled with wakefulness; and when they do sleep, it is not "tired nature's sweet restorer," but a succession of broken slumbers, interrupted by startings and disagreeable dreams. Excessive smoking has been known to produce a state of the system in all respects similar to delirium tremens. Most of the narcotics, I believe, when habitually indulged in, render the sleep broken and disturbed with dreams of frightful imagery.

I am not disposed to condemn the use of tobacco in total, for I am not certain that in many constitutions and temperaments it may not be of some service, or at least, that it may not be free from harm; but in those of a nervous temperament, predisposed to dyspepsia and hypochondriasis, I am certain that it is capable of, and generally does do, a vast deal of harm, and is productive of an amount of bodily and mental suffering which few men are willing to encounter a second time. Every physician of much experience in chronic disease, cannot fail of seeing, in some of the cases which I have attempted to sketch, a portrait of many a wretched patient, who has with eloquence and painful minuteness dwelt on his sufferings, his fears and his fancies. Such cases have

generally been called dyspepsia, and have been drugged and dieted, or sent off on foreign travel, carrying in their waistcoat pocket the Pandora's box of all their woes.—[Boston Med. and Surg. Jour.

A. B. SHIPMAN.

*Cortlandville, N. Y., Nov.* 15, 1844.

# BIBLIOGRAPHICAL NOTICES.

ART. 7.—*Elements of Materia Medica and Therapeutics.*—By JNO. P. HARRISON, M. D., Professor of Materia Medica and Therapeutics in Medical College of Ohio. Vol. 1, p. 405—Published at Cincinnati, 1845.

"What," said one, on hearing the announcement of this work, "another treatise on Materia Medica? Was there need of such a publication, so soon after the appearance of the copious system of *Pereira?* And then, too, we had *Bell* and *Nunnelly*, only a few days since, on the same subject; surely there was no call for this volume." But we demur to such objections. We live in a free country, and every author has a right to publish what he pleases, and every man may, if he please, be an author. Besides, if the public choose to patronize new works, who has reason to find fault? Ours is a book-making age, and a book-selling age too, and it would really seem to be somewhat, a book-reading age. We have never yet seen a treatise on any department of medicine, from which something valuable might not be gleaned, and therefore we go for free trade in this matter. And surely, it is ungracious to find fault with others for making books, that do us no harm, and from which we have no disposition to derive advantage, however excellent they may be.

We say then to all sensible and enterprising authors and compilers, go ahead, and keep the press in motion just so long as the public will buy and read; only do not taint the moral atmosphere. Say what you please about politics, law, the physical and medical sciences, in all the possible ramifications of each, and if the people choose to patronize you, we shall not complain.

But to the work before us. It is not exactly after the old models, and therefore has somewhat of novelty to commend it. We do not endorse novelty, as such, and wish not to be regarded as lauding Prof. Harrison, simply for the reason, that in some sense, he has struck out on a new path. We name the circumstance, for the information of those, who have not seen the work.

The novelties of the book, are mainly these: an attempt to abridge the materia medica, by striking out a very large number of articles that help to fill the ordinary treatises; and an effort to show, that all the remedial agents called for in practice, may be comprised in a classification much more comprehensive than any to be found in recent works. There are, to be sure, other suggestions and statements that have something novel in their character; but the two features above named, strike us as *the* points for especial notice by the general reader.

The volume before us treats, 1st. Of that interminable, and alas! almost unprofitable topic, *the modus operandi of Medicines.* 2d. Of the effects of remedies. 3d. Of classification. 4th. Of the circumstances modifying therapeutical indications. 5th. Of the theory and art of prescribing. 6th. Synopsis of incompatibles. 7th. Poisons and their antidotes. 8th. Patent medicines and nostrums. 9th. Indications of cure. 10th. Alterants. 11th. Mercury and its compounds—Iodine, Arsenic, Nitric Acid, Guaiacum, and Sarsaparilla. 12th. Evacuants.

We need not advise those who are familiar with the views of the author, that in the volume before us, he rides at least, *one* hobby. And who is without something like a hobby, in medicine? We may have ours, though unconscious of any, at this moment. Whatever it may be, that of Prof. H. is evidently *solidism*, as opposed to the doctrines of the humoralists. And we are free to say, in general terms, that he does his favorite quite as much justice, as its merits demand. Indeed there is very much in the book, that commends it to our regards. Most of the advice and cautionary precepts found in it, are kindred with those we have long been in the habit of incorporating with our public teachings; and it is no sin, to like them so much the better, for this. At least, we think so.

The author would not permit his judgment to be warped, so far, as to deny the entrance of medicinal and other agents into the blood. Yet he seems to think this concession not at all unfriendly to the doctrine of medicinal efficacy thence resulting. "Medicines (although they do enter the blood) do not go there as foreign agents, but are assimilated," &c. &c. But let us see if the author has not evinced palpable inconsistency in this matter. On page 30, he says, "there is not a single indication of cure, when a true diagnosis of disease is made, which favors, in the smallest degree, the idea, that medicines by entering the circulation, accomplish their useful purposes." This position is laid with sufficient clearness to guard it from misconception, and we suppose it to be the precise idea intended to be conveyed. But, if we put it side by side with a sentence on page 160, there will appear to be at

least a squinting of inconsistency, if not a contradiction. Thus, "the increased temperature of the surface, with an expanded pulse, and a better hœmatosis, are proofs of their power (alterant medicines) on the blood, and the moving forces of the circulation." What would be the natural deductions from these statements, on the part of a plain common sense observer, not bound down by any favorite theory? We think he would be very apt to call to mind a case of chlorosis, in which there is a true anœmic condition, so obvious that the diagnosis need not be mistaken. We have here then a "true diagnosis." What is the indication, or rather, in the words of the author is there "a single indication of cure" in the case? We presume that the voice of the profession would point, instantly, to some of the preparations of iron. The patient is treated accordingly. The bloodless appearance vanishes, and the hue of health is again perceptible. There is a rectification of animal heat, as well as an improvement of pulse; and this would seem to be just such a case as the author might have had in his eye when he wrote the sentence on page 160; "the increased temperature of the surface, with an expanded pulse, and a better hœmatosis, are proofs of their power on the blood, and the moving forces of the circulation."

It may be that Professor H. has a mode of explanation, suited, in his view, to solve the difficulty above cited. Yet we can but believe, that practical, good-sense physicians, who have no system to defend, will see the matter as it has appeared to us. Nor is this all. The analytic experiments of several distinguished men prove conclusively, that preparations of iron given in anœmic disease, do most obviously change the composition of the blood. We quote as follows, by way of example and illustration. A chlorotic girl, aged 20, was placed by M. Herberger,* on the use of ferruginous preparations, which were continued two months. The analysis of blood drawn from the patient before the iron was used, and subsequently, indicated among other things, as follows:

| | *Chlorotic blood.* | *Blood after cure.* |
|---|---|---|
| Albumen | 78.200 | 81.509 |
| Globuline | 36.470 | 94.290 |
| Hœmatosin | 1.590 | 4.029 |

But the analysis were not confined to the blood alone. The urine of the same patient was examined, before and after cure, with the following results:

| | *Before cure.* | *After cure.* |
|---|---|---|
| Water | 975.43 | 938.70 |
| Solid matters | 24.57 | 61.30 |

* Edinburg Medical and Surgical Journal, 1844.

During the treatment of the patient, the urine constantly showed the presence of iron, and the same was also found in the sweat.

We have only to remark, in addition, that it is wholly irreconcilable with our ideas, to believe that all these very manifest changes in the composition of the blood and the urine, had no relation to the curative action of the main remedy. We have seen that the disease was well marked, that iron was clearly indicated, and the results have been truly announced. It would be out of place, perhaps, to dwell on this subject, our proofs being too numerous for quotation here.

The idea of abridging the materia medica, by casting off useless articles, was long ago entertained. But we have no recollection of a treatise, prior to the one before us, devoted prominently to this end. We have often advocated the expediency of this measure, and yet, on sober reflection, we really think there are some difficulties in the way. If our books never fell into the hands of men whose information was exceedingly scanty, and whose own resources were limited, it might do to employ the pruning knife, as our author has proposed to do. A book on this plan would answer very well for practitioners who have had large experience, and have learned the value of a thousand minor agencies, that need not be recorded for their advantage, but which might sometimes be very important to the tyro in the profession. The latter may commence his operation, far from a dense population, where the more valuable and costly articles of the shop cannot easily be procured. To him therefore, an acquaintance with *home* articles is of the last importance, and hence the value of a system of materia medica, that shall take a wide range, and notice the comparatively feeble, as well as the more potent agents.

We confess that we have been half inclined, in our public teachings, to be silent in reference to a good many remedial agents; but we have been impelled to notice them by just such considerations as those above referred to; and a more enlarged experience has satisfied us that we have acted correctly. Moreover; it should be borne in mind, that we do not agree in reference to what are, or are not, inert or comparatively useless articles. Professor H. proposes to expunge about two-thirds of the articles named in the standard books, and yet he retains, at least, one agent, whose merit (if it have *any*) is so exceedingly homœopathian in our judgment, that we never employ it. There may be others, about whose value there is quite as great professional disagreement, and this is an argument against the proposed excision. In practice, *we* employ a very limited number of articles, and therefore must be understood as pleading for others, rather than for ourselves.

But we pass to notice another feature in the book before us, that has an air of novelty, calculated to excite attention and interest. We allude to the *classification* of articles, based on the curative indications, which are stated to be *six*. We can have no sort of objection to a reduction of the number of classes, for most assuredly, we should prefer six to twelve. We object to the classification of remedial agents, however, in toto, *as utterly impracticable and profitless*. We have never seen an attempt at classification, that was not in itself, an argument against the thing proposed. We beg to refer our readers to all the modern attempts, and they will find abundant confirmation of our remark, either in the concessions of the authors, or the obvious defects of their systems. That classification may be valuable in the study of dead matter, whose character is unvarying, and of plants and inferior animals that are comparatively free of change, we concede. But to put down *definitively*, the modus operandi of agents, as classification attempts to do, in regard to a body governed wholly by *vital laws*, about whose nature we know nothing, and whose manifestations in the economy are perpetually modified by a thousand circumstances, whose philosophy we vainly attempt to fathom and explain, is, in my opinion, utterly at war with, and totally subversive of the far-famed Baconian method, which seems to have for its basis, the grand idea of proceeding from the *known to the unknown*, in all rational research.

Acting out this view of the subject, we teach Materia Medica and Therapeutics, by the alphabetical arrangement, and are consequently untrammelled by theory. We tell what the best writers say of the modus operandi, in general terms, and give our own opinion in the premises, governed by the facts. And if it should hereafter seem good to us to *classify*, we promise the author of the book before us that our system shall not extend to *No.* 6. From a pretty careful survey of the views of Prof. H., we have come to the conclusion to have but *one* class in our system. To secure that, we propose to strike out the last five classes, named on page 38, and to retain but *one* grand class of *Alteratives*, or *Alterants*. We cannot conceive of a single agent, that can be brought to bear successfully upon the animal economy in a state of disease that is not, in some sense, an *alterant*. And however distinct the six classes on page 38 may seem to be, at the first glance, it is not needful to go further than page 155, to see that between *revulsives* or *derivatives* (class 6th) and *alterants*, even as the author defines the latter, there is a resemblance sufficiently obvious to justify the notion of identity. "*The therapeutical action of alterants* is evinced, 1st, By *suspension of morbid phenomena*: 2d. By the *superinduction of a new action*:

and 3d. By *substitution of action.*" The original statement is not thus italicised, but we have made it to appear so, to call attention to the extraordinary likeness between either of its parts, and the universally received explanation of the action of *revulsives.* Comment here is unnecessary, further than to remark, that the text in its relations is self-condemnatory of any kind of classification of remedial appliances. And while we speak thus plainly, we are of opinion, that in some respects, the attempt of Prof. H. is much more praise-worthy than those of some of his predecessors.

In conclusion, we beg leave to express our belief that this new work, so highly creditable to the Cincinnati press, as well as to the industry and zeal of its worthy and intelligent author, will be read with interest and profit; and we cordially commend it to the profession.

T. D. M.

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ART. 8.—*A Synopsis of the Symptoms, Diagnosis and Treatment of the more common and important Diseases of the Skin. With sixty colored Figures.* By N. WORCESTER, M. D., Professor of Physical Diagnosis and General Pathology in the Medical School of Cleveland, late Professor in the Medical College of Ohio.—Philadelphia, Thomas Cowperthwaite & Co.; Cincinnati, Desilver & Burr, 1845, pp. 292.

The object of this Synopsis, as expressed in the preface, is to supply an obvious deficiency in our profession on the subject of Skin Diseases. That deficiency consists not in a want of treatises upon the subject of Skin affections, for these are sufficiently numerous; but the defects relate especially to the want of a concise treatise, illustrated by accurately colored figures, delineating the most common and important forms of these diseases. It must be confessed that authors have taxed their ingenuity to the utmost extreme, apparently for the purpose of manufacturing as complex and intricate an arrangement as was possible; and while learning and patient investigation was sufficiently obvious in many of these systems, their practical utility is certainly less evident. It is well known that no class of affections is of more difficult diagnosis than diseases of the skin; and notwithstanding the advantage of occular inspection is possessed by the Physician, he often experiences the greatest difficulties in arriving at satisfactory conclusions. These difficulties depend, measurably, upon the defective arrangements usually adopted by systematic writers; arrangements, which, by their impracticable minuteness of division, defy the practical tact of those whose experience is not of the most extensive character. And in addition to these diffi-

culties, we may add, that the want of colored figures, and the impossibility of conveying by mere verbal descriptions, an intelligible idea of the color and general appearance of the disease, we are furnished with a sufficient explanation of the confusion too commonly attending the diagnosis of these affections.

The following extract from the preface will exhibit the author's design: "Utility and not originality has been his design; he has drawn information from every source within his reach, and it is hoped that the author has proved in this compendium that he has studied with some care, the works of Willan, Bateman, Alibert, Cazenave & Schedel, Plumbe, Thompson, Rayer, Wilson, Gilbert, Erichsen, Ricord, Baumes, &c. The figures have been selected from Willan and Bateman, Thompson, Rayer, Alibert, Wilson, Erichsen, Cazenave and Ricord; and it is believed they will be found well executed."

The author adopts the classification of Willan; which is based upon certain external signs and resemblances, by which the diseases are arranged in eight orders. The author of the treatise before us, has made an effort to facilitate diagnosis by dividing the eight orders of Willan into two groups, the *dry* and the *moist*. GROUP FIRST, or the *moist*, includes three orders, viz: *Vesiculæ*, *Bullæ*, and *Pustulæ*. GROUP SECOND, or the *dry*, includes the remaining five orders, viz: *Exanthemata*, *Papulæ*, *Squamæ*, *Tuberculæ*, and *Malculæ*.

There can be no doubt that the classification of Willan, will, to some extent, facilitate diagnosis; but it is open to the very serious objection of bearing no relation to pathology of disease, being based exclusively upon signs or external resemblances. The arrangement of Wilson is certainly more scientific, than any other that has been promulgated, inasmuch as it is based upon the *anatomy* and *physiology* of the structures involved in the diseased actions. The value of the system before us consists in its concise and plain description of the various topics discussed, but more especially is valuable on account of its colored plates. The various forms of diseases discussed in the text, are illustrated by eight plates, consisting of sixty finely colored figures, very accurate and beautiful in their appearance. These plates will greatly aid the practitioner in diagnosticating the common diseases of the skin; it may therefore be regarded as a valuable manual.

The mechanical execution of the work is highly creditable to the Cincinnati press, comparing well, indeed, with Eastern publications. For sale by Messrs. Desilver & Burr, Cincinnati; and Mr. C. Marshall, Lexington.

# THE WESTERN LANCET.

CINCINNATI, JANUARY, 1845.

## INTRODUCTORY LECTURES.

*On the formation of Professional character.*—An Introductory Lecture delivered November 4, 1844, by JOHN P. HARRISON, M. D., Professor of Materia Medica and Therapeutics in the Medical College of Ohio.

This address abounds in judicious and ennobling sentiments, expressed in forcible and correct language. If the formation of professional character could be regulated by the principles indicated in this address, we can readily fancy a better state of things than now prevails. The high standard of medical character delineated by Prof. Harrison, is fully reflected in his own, and may serve as a model for others. A high and ennobling profession should never be marred by an unseemly deformity in the characters of its members; and we incline to the belief, that so long as obvious defects are not corrected, we will never attain that elevation of character, individually and collectively, which should ever distinguish the true physician.

GENERAL PRINCIPLES.—An Introductory Address by H. H. CHILDS, M. D., Professor of Obstetrics and the Diseases of women and children in Willoughby University.

This address contains *matter;* it is not made up of empty sounding words. The author seems to have had some definite object in view; and for this very considerate course, he deserves the thanks of those whose business it is to read *Introductories.*

We cannot regard *all* of the authors general principles as orthodox. Thus—"all abnormal action or disease must be characterized by debility"—"all diseases are diseases of debility, which is either direct or indirect."—"Remedial agents must all possess the character of mediate or immediate stimulants."

These principles are too restricted and partial to subserve the ends of true philosophy. They rather obscure the great truths of our profession by failing to unfold its beauties, rather than to render it plain by simplifying its principles.

The following views express what we conceive to be the true spirit of *inductive* reasoning. "In the one class, the physician adopts an *exclusive system*, and practices by *rule*. "He is confined to a specific direction, which in the nature of things, must be limited in its application. All must be stretched or shortened to the same Procrustean bed—all must take the same remedy—investigation is proscribed, and discrimination is heresy. If timid, his practice must be inefficient; if bold, he strikes with Herculean club, but uncertain aim, a hazzardous and probably fatal blow. He must grope in darkness. The other arranges the *facts* of medicine, and adducing therefrom by a legitimate induction, *General Principles*, makes these the sole guides in his practice."

The following is a home thrust at exclusive views in dietetics. "What but an ignorance of the plainest principles of *dietetics*, has impelled a medical exclusive to banish from his regimen *all animal food* in every case—make *humanity one vast community of Nebuchadnezzars*, and bring forward bran bread a catholicon for all the ills to which flesh is heir."

The author argues strongly and cogently for the necessity of general principles, deduced from well ascertained facts. We cannot doubt that one of the great evils under which our profession labors, is, the want of accurate general principles.

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Harrison's Materia Medica and Therapeutics.—This work was announced some time since as in course of preparation, and the first volume having been issued, we insert in our present number a bibliographical notice of its most prominent features. The second volume will be published during the coming year, and a complete system will then be presented to the profession.

Those who are familiar with the abilities, honesty, and patient investigation of the author of this treatise, will be slow to believe that the work is not one of unusual merit; and we think that a candid and impartial study of the work will fully sustain the high reputation already attained by its indefatigable author. The work addresses itself more especially to the philosophical and thinking part of the profession, and is not made up of those frivolous details, too common in systematic works on Materia Medica, and which serve rather to perplex and con-

tract, than to simplify and enlarge the views of the student. With the view of enlarging the comprehension, of the pupil, and of fixing his attention upon the great principles of this department of medical learning, the author has, very judiciously, as we conceive, abridged the number of the medicinal agents, the nature and effects of which should be relied on by the practitioner. Of five hundred medicinal agents, which encumber works on Materia Medica, at least nine-tenths are either useless, or possess properties so nearly analogous to the remaining one-tenth, that their retention in elementary books designed for the use of students, becomes a source of embarrassment and positive detriment to the noviciate. The class of emetics numbering near *twenty* articles, contains but *five* of any essential value; and of *fifty* purgatives, less than *one-fourth* that number will be used by the practitioner. For the use of the more experienced practitioner, however, these numerous articles may be retained in dispensatories and pharmacopœias, for his enlarged knowledge will prevent an injudicious selection; but to present this vast number of medicinal articles to the *student*, whose acquirements are insufficient to guide him in a proper selection, totally defeats the object in view. We cannot but approve, therefore, of Prof. Harrison's arrangement.

The author's views on the modus operandi of medicines, a favorite subject with him, are perhaps too exclusive. We have but little respect for the humoral pathology; its ancient and time-worn visage does not inspire us with the veneration commonly appertaining to ancient relics or long cherished sectarian dogmas; nor is its modern paternity sufficient authority to establish its claims to our confidence, or to direct attention from its dogmatic origin in the remote periods of medical delusion. We are not disposed to doubt, however, that foreign bodies, medicinal and poisonous, may and do act upon the solids through the medium of the blood; and hence we say, the author is too exclusive in his philosophy, when it is positively denied that medicinal agents, as such, ever enter the circulation. The fact cannot be concealed, however, that many instances in which medicines are presumed to act through the blood, are, in truth, erroneous conculsions, and that they are much less frequent than is usually believed. And another fact should not be overlooked in this connection; and that is, the very obvious tendency, *at the present time*, to revive the old doctrines of the humoralists, and to apply their exploded tenets in the practice of medicine; and hence, it becomes peculiarly important, that this specious doctrine should be disrobed, and exposed in its native characters.

The most remarkable feature in the defects of medical science, is its

tendencies to vibrate to the utmost extremes; and it becomes the highest prerogative of the true philosopher to interpose his authority, to prevent the success of ultra doctrines. Our profession like the untrained populace, is too easily deluded by bold and positive assertions, combined with the sophistry of speculative minds; and hence it is, that great leading *doctrines*, instead of facts, and the pure science-sustaining inductive reasoning, from which *principles* are derived, become our guides, false and allusive but supreme in their control. Laboring under these infirmities, as our science unquestionably does, we should receive with favor all efforts tending to restrain ultraists, and to equalize the great principles of Medical Science.

That Prof. Harrison's work will exert a salutary influence, by its high-toned philosophy, we cannot doubt; and when completed will afford a very valuable system for the student and practitioner.

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WILLOUGHBY UNIVERSITY. — We learn by a publication recently issued, that one hundred and twenty Students are in attendance upon the medical lectures of this institution. The number, we believe, is twice as large as at any former period. The collegiate year is divided into three terms; the first, (1844–5) commences on the 6th of November, and continues sixteen weeks, the fee to which is $55. The second term will commence on the 26th of March, and continue thirteen weeks; one lecture and one recitation daily; fee $13. The third term commences on the 23d of July, and continues thirteen weeks; fee $13.

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CLEVELAND MEDICAL COLLEGE.—*One hundred and nine* pupils are attending lectures in this school during the session of 1844–5. This is a very respectable class for a new school. Seven Professors compose the Faculty; and the fee to the entire course is $50. A course of instruction consisting of lectures and recitations, on all the branches of medicine, will be given during the summer.

We cannot avoid remarking, in this connection, that, according to what we conceive to be due to the profession, our friends at Willoughby and Cleveland have reduced the fees for tuition too low. We cannot think that it comports with their interests to adopt this course, and it is certainly injurious to the interests of the profession generally.

Mode of dressing in Amputations.—Notwithstanding the skill of the French Surgeons as operators, they still adhere to the system of complicated dressings in amputations, and the almost inevitable result of extensive suppuration. Union by the first intention will not usually be secured by these complicated and injurious dressings. The English Surgeons are more simple and rational in dressing stumps, but a still greater degree of simplicity may be advantageously adopted. In a case of amputation of the leg, recently performed by Prof. Dudley, in presence of the medical class, the utmost simplicity was observed in dressing the stump. Instead of the charpie, and ointments, and complicated bandages of the French, or the extensive and sometimes injurious adhesive plasters used by others, nothing was applied but a simple roller, by the accurate mechanical adjustment of which the edges of the wound were brought perfectly in apposition, and union by the first intention was secured. It is obvious that every source of irritation should be sedulously avoided, and we presume that no dressing will so well secure this object, as the simple roller used by Prof. Dudley.

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Cure of Phthisis Pulmonalis.—We have repeatedly called attention to *nostrums* and *specifics* for the cure of tubercular consumption; this was done rather to furnish instances of the curious and extravagant notions of the profession, or the credulity of the people; and the following mode of cure is inserted with the same view.

"The Surgical operations of Dr. Von Herff, (of Darmstadt) at present attract great interest here. These operations have, in several instances, effected a decided cure in cases of tubercular pulmonary consumption—*phthisis tuberculosa.* The seat of ulceration having been ascertained by means of the stethoscope, the matter is discharged outwardly by an incision made in the cavity of the breast, penetrating the lungs. The cure is finally effected by medicine injected into the wound by a syringe. We have hitherto refrained from making known these operations, as we wished to await the results; but we are now enabled to affirm with confidence, that in several instances the operations have obtained the most complete success, and in no case have been attended by any danger to life. We hope that Dr. Von Herff, after an extended series of experiments, will make the observations deduced from them the subject of a philosophical inquiry."

The presumption of curing a constitutional disease by local remedies, will strike the *rational* physician as a supremely absurd proposition.

Hope's Pathological Anatomy.—This work having been completed and bound, can be furnished to those who may wish to obtain it by applying to Messrs. Desilver & Burr, Cincinnati, and to C. Marshall, and C. S. Bodley & Co, Lexington. In consequence of the Editor's removal from Cincinnati, the work cannot be completed in *Parts*, as was originally contemplated, until the coming summer; therefore, those who have subscribed with the view of obtaining it in that form, cannot be supplied before the time above specified; but should they prefer buying the book bound, it can be obtained from Messrs. Desilver & Burr, Cincinnati. Those who have received Part I. have the privilege of returning it, if they wish to obtain the bound volume.

Clinical Class at Blockley Hospital.—The *Medical News* remarks—"We are informed that the class attending clinical lectures at the Blockley Hospital numbers 290."

*Two hundred and ninety* pupils attending a single Hospital! What possible *practical* utility can clinical instructions be to such an immense concourse of students, crowding the wards of a Hospital. Very little, we presume.

Monument to Dr. Forry.—We are gratified to learn that a proposition has been made to erect a monument to the memory of Dr. Samuel Forry, late Editor of the New York Journal of Medicine and Surgery.

TO THE EDITOR OF THE LANCET.

Sir—It is an essential feature in all civilized governments that no person shall be condemned without permission to present evidence in his own defence. But as we have been denied this *right*, I think you will not refuse to inform your readers that not only the other three physicians who were engaged in the case, but also the nurse, and wife of the patient, concur in condemning the report of Dr. Stewart, which appeared in the June No. of your journal, as incorrect in *many important particulars*.

I remain, Sir, your obedient servant,

*Sidney, Jan.* 9, 1845. P. BEEMAN.

The author of the above note seems to labor under a misapprehension in relation to injustice having been done him in any publication in the

Lancet. In Dr. Stewart's publication, in the June No. of the Lancet, he only alludes to Drs. Beeman and Mann as consulting physicians, and that they subsequently attempted to injure him by representing, *in the public newspapers*, that he had been guilty of mal-practice. Dr. Stewart made no charges against Drs. Beeman and Mann; and in our note appended to the case, we simply expressed an opinion as to the general correctness of the course pursued by Dr. Stewart in the treatment of the case. In all this there is nothing condemning Dr. Beeman; and his intimation that "an essential feature of all civilized governments" has been violated, reflects but little credit on his discernment or civility.

## OBITUARY RECORD.

The following notice was marked for insertion in a preceding number.

Death of Dr. Samuel Forry.—Although the death of this gentleman was noticed in our necrological record last week, we are prompted, by feelings of respect for his memory, to recur again to the melancholy event. Those who were conversant with Dr. Forry's condition in his last sickness unhesitatingly say that he was a martyr to severe study. The brain was over-worked by laborious investigations, and he fell, in the beginning of his usefulness. His organization appeared to be feeble, and liable to be easily deranged by prolonged mental activity. It is probable that the exposed life he led in the Florida war, while holding a medical commission in the Army, contributed to weaken the physical energies of a naturally frail body, and lessened the resisting powers of the system to the attacks if acute disease. In person, Dr. Forry was of middling stature; his figure was slight, with an expression in his countenance that was indicative of the man of thought. In the circle of medical sciences vital statistics seemed to be the province which afforded him the most satisfaction. Perhaps no one was ever more thoroughly devoted to investigations on the effects of climate than, himself. The work produced by him on this subject during the last season, is the one which will most favorably transmit his name to posterity. In it the peculiar bias of his active mind was exhibited. For analyzing great principles, and explainining laws and phenomena connected with this department of science, he had no superior in this country. As a journalist, and a chronicler of the claims and fame of others, he had scarcely time, since the commencement of an editorial career, to exhibit all the

talent we considered him capable of exercising. There was a fairness and spirit of candor in his leading editorial comments, that never provoked others to war against the editor, however much some might have objected to the freedom of correspondents.

A meeting of some of the physicians of New York was recently held, at which resolutions were passed in relation to the early death of Dr. Forry, exceedingly creditable to them. May the monument they propose to raise over his grave, speedily mark the spot; and may those who knew him, emulate his virtues, that they may, like him, live respected and die lamented.—[Boston Med. and Surg. Journal.

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Died, suddenly, at Edinburgh, Nov. 14, John Abercrombie, M. D., the well known author of works on Diseases of the Abdominal Viscera, Diseases of the Brain and Spinal Cord, &c. His death is said to have been caused by laceration of a branch of the coronary artery.

# THE WESTERN LANCET.

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## MEDICAL JURISPRUDENCE AND PRACTICAL MEDICINE.

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Art. I.—The confinement of the Insane. By Thomas D. Mitchell, M. D., Prof. Mat. Med. and Therap. in Transylvania University.

It was well said by one of our ablest medical writers, that "they entertain very limited views of medicine, who suppose its objects and duties are confined exclusively to the knowledge and cure of diseases. Our science was intended to render other services to society. It was designed to extend its benefits to the protection of property, of life, of civil rights, and to detect guilt and fraud in many of their forms." Concurring as I do in the sentiments quoted, I have selected as the theme of present meditation, a subject which involves one of the dearest boons that even a free-born American can claim as his right; I mean, personal, civil and social liberty. I allude to the legal confinement in an asylum for the insane, of persons reputed to labor under mental alienation.

Passing by, for the present, the philosophy of insanity, and the diverse definitions of the term, I propose to analyse, very briefly, the vastly important proposition, *what are the circumstances in the character and conduct of one said to be insane,*

*that justify his seclusion from society, and the interdiction of his civil rights?.* Are there any elements or features erroneously held by many to be so characteristic of insanity, as to require the most rigid confinement? It is of the last importance to analyse these features, and to demonstrate their true value in forming a just decision. And, on the other hand, is there a veritable criterion by which to settle the question of confinement, so as to do violence to no one, and yet to consult and be governed by the best interests of the community? Who can fail to perceive that it is a desideratum of unspeakable moment to every citizen, to determine, so far as practicable, what that criterion is?

I am well satisfied that no topic comes within the purview of juries in this country, touching which there are more groundless and delusive impressions. And when we reflect that the *liberty* of a fellow-being, with all that clusters around that mighty word, is entrusted—alas! how often!—to the decision of incompetent men, who can wonder that monstrous and appalling results have followed? But there is a feature in the case, that is even more humiliating; and that is the undeniable fact, that our profession, by its ignorance on this very subject, has contributed not a little to augment the evil. The magnitude of the inquiry swells, in our estimation, to almost immeasurable dimensions, when we remember that motives the most sordid, base and unnatural, have prompted men to seek the banishment of their nearest relatives, to the gloom and horrors of a mad-house. The standard authorities furnish proofs in point, sufficiently horrific to rouse the most dormant sensibilities of our nature. So late as 1815, a lady who became insane immediately after giving birth to a son, was confined by her husband in a miserable garret, coarsely fed and as meanly clad, while he enjoyed every species of luxury. For twenty years was this incarceration continued, when the son being of age, came to the rescue, and released his brutally injured mother. In other cases, medical practitioners, attorneys and others *have been* known to combine with relatives, in order to secure

the confinement of a person charged with insanity, in the hope of obtaining temporary or permanent possession of an estate, to which they had no legal claim.

Let it be borne in mind, that human nature is always, and in all places the same; that its tendency to acts of fraud, injustice, violence and cruelty has never ceased, and never will, while its essential character remains. Its readiness to oppress and wrong the weak and comparatively defenceless, is stereotyped, and should ever be in view of the true philanthropist.

Whatever be the deficiencies of the doctors, it is conceded that very few lawyers, if any, are ignorant of what are supposed to be the essential features of insanity. In the legal examination of witnesses, they are studious to prove the fact, that the party under trial has cherished and harbored most unjust and unnatural *suspicions;* that he has labored under the belief that a *conspiracy* had been deliberately formed for his ruin, and that too by those who were formerly his *best friends;* that he has evinced strong *dislike*, and even *hatred* towards *near relatives;* that he has threatened to *kill* certain individuals; and that he actually carries *deadly weapons* about his person.

Very much do I regret to be compelled to add, that some *medical* men seem to think it quite sufficient to prove the points just named, in order to show the fitness of an individual for an insane asylum. It is a main design of the present effort, feeble though it be, to demonstrate the fallacy of such a course of procedure, and to prove that even though such features in character and conduct may be satisfactorily established by evidence, they donot make out such a case of insanity, as to justify confinement in a lunatic asylum, even though they may show the existence of some degree or grade of mental aberration.

The opinion has been often uttered, that few, if any persons are possessed at all times, and under all circumstances, of *absolutely and perfectly* sound minds. A writer of the highest

order has affirmed, that in all the universe, there is but one truly sound mind, viz: the mind of Deity, and that all beside are more or less the subjects of hallucination. In truth, the various shades and forms of monomania are so prevalent in what is conceded to be rational and refined society, that if perfect sanity were indispensable to the enjoyment of personal liberty, thousands of our race who daily and peacefully mingle with the crowd, would be doomed to the limits of an asylum.

It is our purpose, therefore, to explode if we can, the false sentiment, that deep-rooted suspicions, notions of a conspiracy, hatred of best friends, threats to do violence, carrying deadly weapons, and the like, are such infallible tokens of insanity, as to require a jury, in view of their oaths, to render such a verdict as shall deprive the party under trial of his civil rights and his personal liberty. And in making this effort we feel that no motive prompts us save that strong, inherent, imperishable desire, ever present to our minds, that every American citizen may be protected in the enjoyment of those sacred, and priceless privileges, for the procurement of which, our forefathers shed their blood, and sacrificed their property.

Here let us pause to take a hasty glance at our own immediate acquaintance, yea, at our own selves; for this is a personal affair, and cannot be honestly decided, if we keep not constantly in view the golden law, to do unto others as we would have them to do unto us. Let us inquire if it be wholly foreign to our nature, in the various changes that befal us, to cherish most unjust *suspicions*, and that too, against real and substantial friends? And if we feel a repugnance at the trial of ourselves, let us turn over a few pages of social life, and see if we cannot account for more than one family broil, or neighborhood explosion that owed its birth to nothing better than unworthy and unnatural *suspicion?* The domestic and the social circle would rarely show a ruffle on its placid surface, if it were not for the blasting influence of dark suspicion. It is *the* bane of enjoyment in a thousand instances, and kindles the *fires of hell* around the family altar. Even in the garden of

Eden, it had a resting place, and its Upas touch poisoned the fountains of our being. The interdicted fruit had scarcely passed from Adam's lips, ere foul suspicion tempted him to charge the God who made him with unkindness; and in all the chequered scenes of life, from that sad moment to the present hour, the poison has been tainting human bliss, and filling earth with violence and death.

Are not all conscious that such is the prevalence and such the influence of suspicion in confessedly sane society; and dare we pronounce a verdict against the unhappy man or woman, charged with insanity, because of the developement of the very same trait of character? If it be proof of insanity in one case is it not equally so in every other, where it is manifested to the same extent, and with the same degree of persistence? And if such be the state of the case, would not a fair and full investigation be likely to send Judges, lawyers and jurors, in common with the party on trial, to the same quarters?

But, what shall be said of one alledged to be insane, if it be made to appear that he has long cherished the idea, that certain persons have deliberately *conspired against* him, and are perpetually watching his movements? Is not such a man a proper subject for the discipline of an asylum for the insane?—And if he be not confined, may he not in an evil hour, imbrue his hand in the blood of the imaginary conspirators?

Cases like the above have been frequently stated and urged, as ample justification of rigorous measures; and so far as mere sound is concerned, the appeal may seem to be valid, and yet it crumbles at the touch of scrutiny. Many a wayward son or daughter, kept under more severe restraint than their judgment recognised as becoming or needful, have imagined that parents and friends were systematically conspiring against their comfort and peace. The same has happened in more distant relationships, a thousand times, and in the absence of a single good reason why such motives should be entertained for a moment.

One of the best writers on insanity (Pritchard) tells us, that he knew a *doctor of laws*, who had taken into his head, that all

the freemasons had entered into a formal league or conspiracy against him. This man, who in other respects was perfectly sane, at the very moment of indulging the ridiculous whim, held with high credit a chair in a university. In our own country, the odious epidemic, called office-hunting, has led its disappointed subjects in a thousand instances, to cherish such inveterate prejudices against men suspected of conspiring to defeat their pretentions, as to lead them ever afterwards to evince their hatred for the supposed conspirators in acts of no doubt ful character; and yet, these cases, by no means few and far between, seldom, perhaps never, awaken a suspicion of the workings of insanity. How often do we hear our acquaintances indulging in soliloquies like this: "If it had not been for A and B. and C. and D., who put their heads together to defeat and disappoint me, because of an old grudge, I would have succeeded in this or that scheme, and my fortune would have been secured. But I mean to be revenged. True, I cannot prove the correctness of my suspicions; yet I feel assured that they have conspired to prevent my success, and they shall one day suffer for it." Such things have occurred in instances that cannot be numbered, and wholly independent of the slightest imputation of insanity. And yet, is not the indulgence of the vagary, that men are conspiring against A, who was never suspected of being insane, quite as good evidence, that *he* is not of sound mind, as the same act on the part of B, who is actually on trial as an insane person? I speak of the value of the proof *per se*, and demand whether in itself considered, it is not quite as applicable in the one case as in the other?

But the defendant is *unnatural*, as his conduct to his nearest and dearest *relatives* or friends, fully proves; and *therefore*, he is insane. All this sounds like irrefragable testimony in the ears of an unenlightened juror, or an ignorant and stupid lawyer or doctor. And yet, we have to reflect but a moment or two on this feature, to reach the conclusion, from which it will require something more than sophistry to drive us, that if dislike or hatred of nearest relatives be proof of insanity, then are

thousands insane who mingle constantly with society, untouched by suspicion in this relation. There are men and women in all the connexions that subsist among civilized communities, who have permitted the most trifling, as well as graver incidents, to place an impassable gulf between them, so that intercourse has ceased to exist and the parties are implacable. Histories of such cases can be gathered in clusters, in every rank of society, but most profusely in the higher walks of cultivation, refinement, talents, and unsuspected mental integrity.

In the face of these well-ascertained truths, how strange is it, that sensible men will venture to deprive a citizen of his liberty, *as insane*, because, forsooth, he acts towards his parents or children or friends, precisely as thousands are deporting themselves every day. It is truly wonderful, how apt we are to discover faults and to make them available, for a given purpose in one case, and to pass them by with utter indifference, in cases without number.

Again; it is deemed an almost infallible sign of deranged mind, if an individual whose conduct is somewhat eccentric, venture to use *threatening language* and to carry about his person *deadly weapons*, with which, in a fit of passion, he might put his threats in execution. "Why the poor creature is out of his senses, to-be-sure; and although his friends may offer bonds for him to keep the peace, what are they worth, if on his discharge, he should make a fatal display of the bowie-knife, or pistol, or the tomahawk? Far better is it, to decide that he is insane, and forthwith send him to the asylum." Such is the language, it *may* be, of well-meant but ill-judged philanthropy; and to make this more apparent, we will pause a moment for reflection to see how the matter stands. We have mentioned the *tomahawk*, and now say, that we know a preacher residing in an eastern city, though a native of the west, who is held to be a subject of mental alienation by two thirds of all his friends and acquaintances. This individual not long since (and it may be at this time) was in the habit of

carrying a concealed tomahawk wherever he went, on the Sabbath as well as on the week day, in the pulpit and out of it. He supposed himself to be so obnoxious to many persons, that his life was in danger, and hence the precaution just named. We know, moreover, that this gentleman was not slow to employ menacing language, for we once heard him in an ecclesiastical body of more than seventy persons, in an angry reply to a speaker, thus conclude a speech of much asperity: "If we had him in my native State, we would know what to do with him;" intimating by his gesture and whole manner, a resort to violence.

But dropping the tomahawk as being a little too savage even for illustration, let us try the argument of the bowie-knife and pistol, since these are more genteel and refined. And is it possible that a jury can be found, on whom the charge of carrying either of these weapons would exert any sort of influence? I grant that the practice is a most pernicious, not to say ridiculous one; and I would fain have it blotted out of civilized society and transferred to some place worse than Texas. It is one of those modern refinements that tend only to debase and barbarize, and out of which no possible advantage can be educed. Well do I recollect the time when a man was deemed a suspicious character if detected in carrying a sword cane, for even that was forbidden by the laws of the State, and none but men of questionable reputation were caught in the act of violating them. But those good old wholesome restraints have passed away, and now, forsooth, boys of ten years old and even our grey-headed veterans, feel their persons to be in constant jeopardy, unless a bowie-knife, dirk, or six-barrelled pistol find a permanent lodging place about them. If you push them hard for a justification of this habit, you will be told it is for self-defence, and acquired by making long journeys among strangers, or something else of little more worth.

But the habit is established and I do not expect to talk any man out of it, so that bowie-knives and pistols are to be the order of the day. What I object to here, however, is the folly of

condemning an imputed maniac for being guilty of having a six-barrelled pistol in his pocket, while it may be that a dozen men or more, within the court house, have just such weapons in their possession, with all the disposition needful for using them. Moreover, if a poor creature whose occasional indiscretions have brought him before a court and jury on a charge of insanity, be culpable for having a pistol or bowie-knife about him, what shall be done with gentlemen of the learned professions, who from repeated use of these engines of mischief in personal combat, have acquired a sort of heroic right to wear them as regularly as they do their watches? Some of them may have killed his man, or two or three men, and the affair is soon forgotten, because of its frequent occurrence; and the right to carry the deadly weapon as before, is hardly called in question. But if a man, suspected of being a little deranged, should, in a gust of excitement, employ his weapon fatally in a single instance, the hue and cry is heard every where, "shame, that a madman should be suffered to go at large, with a pistol in his pocket." Nay, it may be, that men who would be none the worse for a temporary residence in a lunatic asylum, are among the first to raise the note of alarm.

In all this, I am far from defending the man charged with insanity, for carrying a deadly weapon; but I do affirm, that it is not a sufficient argument to prove his insanity, while fashion makes it a very common practice, even in what is called respectable society. To put a stop entirely to so dangerous a custom, I would have no objection that the law of the land should make it an evidence of mental derangement, if a deadly weapon was found on the person of any man. It occurs to me that a few cases of lodgement in the asylum under such a law, would be most salutary in its results; and perhaps our legislatures could not spend a portion of time more profitably, than by enacting such a statute. Sure I am, that its faithful operation would, for a season at all events, greatly increase the number of cases of alledged insanity; and no one can doubt

that under its influence, assassinations would be far less frequent.

Those who will take the trouble to refer to *Ray's Medical Jurisprudence of Insanity*, will find the case of Edward Davies detailed at full length, and illustrating most of the points to which our attention has been directed. He was always noted for eccentricities, saying and doing queer things, but was regarded as a shrewd and intelligent man. He had been in a mad house once or twice, and was finally liberated on a legal process. Among the grounds supposed to establish his insanity, were strong *antipathies* to his *mother* and several *relations;* learning the art of *pugilism;* carrying *pistols; threatening to shoot* certain persons; manifesting strange *suspicions*, and talking about *combinations* against him; speaking indignantly of the manner in which he had been treated by his family and friends; complaining of the filthy habits of the keepers of the asylum, and so forth. On these points, several distinguished medical men testified in favor of his further confinement, but the opposing testimony prevailed and he was set at liberty.

There is one feature in this case that goes to make it not a little ludicrous. The very individuals who were most urgent for his confinement, because unfit to take care of his business, were themselves consulting him about the management of that very business, and could do nothing without his aid.

We are now prepared to solve the proposition stated in the opening of our remarks, viz: What are the circumstances or traits in the character of one charged with insanity, that justify his seclusion from society, and the consequent interdiction of his rights? We have exposed the folly of admitting as evidence in such a case, defects of character or items of conduct, that are held by consent of society, to be lawful in men who pass for rational and sane. We have seen in the details given, that if we interdict one man, whose derangement is limited to a single point, we are bound in consistency to pass a like decision on every monomaniac, from him who believes he *has lost his rational* soul, to the poor creature who fancies him

self to be a plant, or made of glass, or that a fish has taken up its abode in his stomach. And the moment we adopt this as our rule of action, it will be necessary to erect a hundred madhouses for every one that now exists.

The true solution of the proposition is simply this: Every individual on trial for insanity should be pronounced a fit subject for an asylum, whose deportment clearly evinces a disposition to do violence to himself or to others, either in body or estate; inability to manage his own affairs, or to take the usual precautions for self preservation, or for the well-being of his family.

Hitherto there has been an inseparable association in the minds of many, between insanity and a mad house; and hence it has seemed to be enough to establish the charge of insanity, in order to deprive a man of liberty. We have seen, however, and facts by scores could be adduced in further confirmation of the position, that society abounds with useful men, who labor under some form or other of mental abberration, and have been thus afflicted for a series of years. The grand desideratum is, to rend asunder and forever, this unnatural association; and to establish the doctrine, as incontrovertible, that the true design of asylums for the insane, is and ought to be, the confinement and safe-keeping, or restoration of those whose insanity is of such a nature, as to render them dangerous or injurious to themselves, or to others, or both.

Dr. Andrew Combe, in his very sensible book on Mental Derangement, has these remarks: "Having ascertained the existence of insanity, the first question to be decided is, what shall be done with the patient? It is one thing to determine that a man's mind is diseased, and another and a very different thing, to say to what extent the malady has reached; whether it involves only one, or a few, or the whole of the mental powers, and how far it affects his capacity for self-direction in his intercourse with society." "Every body knows," says Dr. C., "that an individual may be *incurably* insane on all subjects hinging on one or two faculties of the mind, and yet be per-

fectly rational and sound on all others; and that in all matters of thought or business, which do not touch that point, he may continue for a long life to display as much shrewdness, prudence and good sense, as nine out of ten of those who never had the fear of a straight jacket before their eyes."

The true problem therefore to be solved and settled by a jury, is not so much whether mental derangement exist, but whether it has *extended so far as to deprive the individual of the power of sound judgment in his own affairs, or of regulating his own moral conduct, so that he shall not endanger the welfare or comfort of himself or others.* The erratic notions or whims of the man are infinitely less momentous as regards the verdict, than his overt acts; the manifestation, by things said and done, that he is really too dangerous to be permitted to go at large.

In the case of Davies, already named, nothing transpired in his after life, to call in question the propriety of his liberation. Although he continued to be eccentric and queer as in former times, to entertain hostile feelings to his mother and other relatives, to carry pistols, to be suspicious, yet all these peculiarities, as some would call them, did not at all interfere with his correct and successful business habits. Nay more, the issue fully justifies the belief, that he was wrongfully deprived of his liberty, for at least a considerable part of the time that he was kept in the asylum. And we are compelled, in view of this and like cases, to coincide in the opinion of Dr. Gooch, as given in the London Quarterly Review, "that it ought to be made punishable by heavy fine and imprisonment, to deprive a man of liberty for any cause excepting mischievousness to others and to himself, and that the parties who commit such outrages, ought to be prosecuted at the public expense."

The celebrated Esquirol, who is a strenuous advocate for the confinement of insane persons, as essential in many cases to their restoration, enumerates many circumstances that make *seclusion* disadvantageous, rather than indispensable; and such

is the testimony of the ablest writers in Great Britain, as well as in the United States.

But, if a person charged with insanity, exhibit none of the peculiar features brought to view in the former part of this address, if in the general there be no valid exceptions to his deportment, other than eccentricity, moroseness or taciturnity, and yet he be caught in attempts to kill, to inflict bodily injury, to burn his neighbor's dwelling, not once only, but frequently, the case is so clear, that none can mistake in coming to a decision. Such an individual is now in confinement in a neighboring asylum. You may converse with him for hours, and not suspect even a tendency to insanity. But his frequent attempts to do violence to others without cause, forced the conclusion that he was not only insane, but an unsafe member of society, requiring seclusion.

Every physician may expect, at one time or other, to be called upon in cases reputed to partake more or less of insanity. And as it is matter of history, that the most detestable motives have prompted not only strangers, but near relatives, to seek the incarceration of men on the ground of insanity, it is a solemn duty imposed on every philanthropist, and especially on our profession, to scrutinize with the utmost vigilance, every case over which hangs a single doubt. And if there be any features that would invite our sympathies to decide in favor of the accused, and there be nought alledged, that inculpates him as a terror to his neighbors or a disturber of the peace, or likely to do harm to himself or to others, we are bound by all that is dear to a freeman in this land of liberty and equal rights, to stand up boldly for his rescue. Our own self-interest prompts to such a course, for it may be, that we may one day find ourselves precisely in such a dilemma. I have said that this is a personal matter, and I repeat the declaration. On our judgment may rest, as on a pivot, the destinies of freemen, to whom liberty is the choicest jewel beneath the stars. It becomes us, therefore, to study the subject with care; to make ourselves familiar with its details. Never let it be said that the obscurest

citizen of these United States was doomed to the bitter pangs of an unjust imprisonment in a lunatic asylum, because of the ignorance of any man who has enjoyed the advantages of a medical education.

There is too much at stake in this matter to permit the reign of ignorance or prejudice or malice, to overshadow and suppress the truth. It was liberty that impelled our forefathers to the field of battle, to crimson it with their life's blood. And were there none in the immortal host that won our independence, who harbored suspicions; talked of conspiracies; had hostile feelings towards some of their brethren and friends; threatened to shoot their supposed enemies, and carried deadly weapons about their persons? Would all these and even more unlovely features, have driven from the ranks of the martyrs of the revolution a single individual? Was not the epithet *mad* Anthony almost universally given to one of the bravest and most useful officers of the American army, whose name and fame are identified with our national existence? And shall the very same traits of character banish into exile, the humblest, poorest descendent of the worthies of '76, who harms no one, and whose chief calamity is, that he is not as amiable and as well balanced, as some around him, who perhaps, clandestinely do their neighbors vastly more disservice than he ever did? To the caves and dens of earth; to the bats and the moles be banished forever such unworthy principles. They are derogatory to human nature, in its rudest dress, and should be reprobated by every member of the medical profession.

ART. 2.—Successful use of Nitric Acid in a case of Purpura Hæmorrhagica. By J. J. BRADFORD, M. D., of Augusta, Ky.

On the 12th of April, 1844, I was consulted by Mr. Cline in reference to the case of his son, aged about 12 years. His health had been generally pretty good, and he was free of Scrofulous disease, either hereditary or acquired.

For about two weeks prior to the attack, he had complained of lassitude and pains in the inferior extremities. His appetite was very little affected, and the alvine discharges had a healthy appearance until a few days before his seizure, when he passed a good deal of dark grumous blood, which greatly alarmed his parents.

At the time of attack his countenance was pale, the skin cool, the muscles shrunken and flaccid, the pulse quick, feeble, and varying from 120 to 140, on the slightest exertion of body; fullness of the abdomen was obvious, with slight tenderness in the right hypochondriacal region; the urine was turbid and in diminished quantity. We found the lower extremities completely covered with spots, varying in bulk from mere scarlet points no larger than flea bites, to large purple blotches, of the size of a fifty cent piece. The front part of the abdomen presented numerous purple spots, quite large. On the chest there were some also, of less size, while those on the neck, face and upper extremities, gave the speckled appearance of the turkey egg.

There was a constant oozing of blood from the tunica conjunctiva, from the schneiderian membrane, the gums, the tongue, the soft palate, the fauces, and indeed from all the mucous membranes, excepting only the bladder and urethra.

The treatment of the case was at first by calomel and rheubarb, as follows:—R. Cal. and Rhei. aa. grs. xv; mix, and divide into three parts and give one every night, with a dose of castor oil on the next morning if the powders fail to give one or two good alvine discharges.

April 14.—The first two powders acted freely on the bowels, but the symptoms were aggravated. The third powder was not given, but in its place the following prescription was administered:—R. Nitric acid 1 drachm, pulv. gum arabic, sacchari alb. aa. 2 drachms, aquæ 5 oz. mix, and give half a table-spoon full every six hours, followed every third day by sulphate of magnesia, if the bowels should not be opened.

April 17.—Symptoms rather better. Patient is not so weak. Less blood passes from the stomach and bowels, and he has a motion without resorting to the cathartic. The petechial appearance is stationary. Continue the medicine.

April 19.—Evident improvement in all the symptoms.—The appetite increased. Pulse 112, and very little blood oozes from any of the mucous membranes. Continue the medicine.

May 1.—The medicine was renewed to-day for the last time, and by the 20th of the month he was entirely restored.

From the success of nitric acid in this alarming case, I feel justified in recommending the remedy to the notice of my professional brethren; at the same time I resign to others all speculations as to the modus operandi.

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ART. 3.—Thoughts on New Remedies. By B. RUSH MITCHELL, M. D., of Madison, Indiana.

One of olden time, who in his day enjoyed no small reputation for wisdom, has said, "there is nothing new under the sun;" and although this proposition has often been the subject of cavil, we think that with a few exceptions, it will be found to be as true now, as it was when first enunciated. And especially is this the fact if we limit the application of the remark to the history of Medicine for the last half century; for, altho' many seeming exceptions may be found, the rule still possesses a degree of generality, in a high sense remarkable. Many new remedies for disease, we are aware, are continually pressed upon the notice of physicians; but if we take the pains to sift

their pretensions, we will most commonly find that those possessing genuine claims to regard, are far from being new, while those which are in truth new, must, as a general rule, forever remain so, because baffling all endeavors to discover wherein their curative excellence consists.

We have full knowledge that this theme has been the subject of frequent remark by others, and that perhaps what we shall offer will be deemed by many, the repetition of an oft-told tale; but inasmuch as there are now before the public some remedies called new, the antiquity of whose pretensions all may not know, we have thought that the developement of their origin might not be an unworthy increase to the stock of knowledge, while at the same time we might "render honor to whom honor is due." In remarking upon this subject, we propose first, to speak of *ancient* modes of treatment and remedies, palmed off as *modern discoveries;* second, of those remedies *which are neither new nor true;* and third, of those *which are new,* but yet occupy a more exalted station in the therapeutical arena than they are justly entitled to; noticing, also, some of the causes conducing to this state of things.

The first of these modern antiques claiming notice, is the *feeding* treatment of Fever and of other continued disorders, the merit of which is claimed by, and professional verdict seems to accord to, Drs. Graves and Stokes. From its antagonism to the "*diete absolue*" of the French, it may be termed the anti-Broussais practice. The principle upon which it is based seems to be, that the Vis Medicatrix will cure a fever if the system be properly sustained by aliment; hence the advice, "to begin early in the disease to give more or less nourishing food." The *principle* is as old as the days of Stahl, at least; the *practice* coeval with the Sage of Cos; yet Drs. Stokes and Graves speak of the matter, as one of which all physicians are in the dark; and of the practice, as one which none but themselves and their pupils adopt. We feel grateful to the gentlemen for their kind disinterment of the wise views of Hippocrates; but farther than this, neither respect for them, nor justice to the

dead, will allow us to go. A passage or two from the Aphorisms of the "man of Cos," will instantly dissipate the claims of Drs. Graves and Stokes to originality. We present, therefore, an imperfect translation of Aphorisms 4th and 5th, which will be seen to embrace all taught by those gentlemen. "In protracted illness, a severe and thin regimen is always dangerous. And again: an attenuated regimen carried too far, is as difficult to support as an excess of repletion." "The sick frequently err in the adoption of a spare diet. They are therein the more injured. In the choice of regimen, *more evil results from abstraction*, than from a small excess." But, conclusive as these appear, Aphorism 9th is infinitely more so, being nearly a verbatim expression of the views of Drs. S. and G. "In prescribing regimen, we are to consider *whether it be sufficient to support the patient until the disease attain its height.*" It then appears that the old "Father of Medicine" was, to say the least, as wise as certain Dublin professors; and we fear that those gentlemen are fully aware of the fact, for their entire practice, bears strong marks of Coan origin.

Nor are they the only moderns, who have made discoveries from this same book of Hippocrates, for in Aphorisms 14th and 15th, the modern discoveries of Liebig and Grisenthwaite, concerning the relation of food to Animal Heat, are to our apprehension, the subject of no indistinct allusion. "The growing body has most of innate heat, *and therefore requires most aliment.* Old men have less heat, and therefore require *less* food." "In winter and spring a generous diet is required; for the augmentation of animal heat *requires a more plentiful aliment.*" These quotations, though not entering into nicety of detail, are yet sufficient to show, that to Hippocrates still, we are to look for the most important truths of our science, and conduce considerably to establish the truth of our first proposition.

Turn we now to another resurrection of ancient truth, viz: the alledged *discovery* by Dr. Graves of the efficacy of Tartar Emetic and Opium in combination, for the removal of sleep-

lessness. We are far from denying to Dr. Graves, high talent and eminent professional attainment; but even our partiality will not allow that he should rise to fame upon the property of another. In reading the lectures of Dr. G. every one must have been struck with the vanity displayed by him, in regard to this plan of treatment. On every occasion it is ushered in with a flourish of trumpets; his claims to originality being so earnestly insisted upon, as to lead almost all to the belief, that he really originated this plan of treatment. The practice, he tells us, is new, "for there is not to be found in the writings of *any* author, the *slightest* trace of such a method of treatment." All this, it must be confessed, sounds very pretty; but it proves to us, one of two things; either, that Dr. G. is sadly ignorant of the literature of the profession, or else, desires to impose on the public credulity. For, so far from there not being the *slightest* trace of such a methodus medendi, in the writings of any author, the *precise* treatment and formula may be found largely dilated upon in the *Medical Essays of Sir Gilbert Blane*, to whom the credit of originating this valuable combination, alone belongs. Thus much for Dr. Graves, and now for M Gendrin, M Martin Solon, and Dr. Bennett.

The reader of the London Lancet has doubtless been for some time amused at the pertinacity with which the latter of these gentlemen, insists upon the originality of the treatment of Rheumatism, pursued by the former. The treatment, as those who have perused the writings of Dr. Bennett are aware, consists in the administration of Nitre diluted in water gruel, in very large doses. "The doses," says Mr. Braithwaite in Retrospect No. 10, "seem to us enormous, and we certainly should not have ventured to administer them, except by the recommendation of experienced men." The practice then, of giving Nitre in water gruel for Acute Rheumatism, is conceded by Braithwaite, Wakely, Bennett, et alia, to be novel; and the doses, according to the opinions of the same judges, are equally original.

Well; it may be so; but if these gentlemen were to turn to the "*Economical and Medical observations*" of Dr. Brocklesby, an English Army physician, of the last century, they would, we think, discover that the merit of novelty attached to the Nitre practice, was clean gone, forever. Not only does that experienced physician recommend Nitre in acute Rheumatism, but he even administered it in the same menstruum, water gruel; and in the *quantity* of Nitre given, exceeded that which Mr. Braithwaite deems enormous, and others have styled incredible. The practice of Dr. Brocklesby, as detailed by himself, was to give Nitre dissolved in water gruel, in the proportion of two drachms to a pint, and in this way he says he has given six hundred grains of Nitre daily! The antiquity of the practice, therefore, is beyond the shadow of a doubt; and from the similarity of the vehicle of administration, dose, etc., we are compelled to infer that the French have pilfered the practice from Dr. Brocklesby. This is rendered highly probable when we remember that the French have been lately seized medically with an Anglo-mania, and set about the translation of the works of old English physicians. What more probable than that the work of Dr. B. shonld thus have fallen into the hands of M M Gendrin or Solon?

While upon this subject we cannot refrain from calling attention to the strange character of the mucous lining of French stomachs. But a few years back and every Frenchman was gastro-enteretic, according to the French Medical Corps; any thing but gum, sugar and ice-water, being considered death-dealing *ingesta*. But now behold the change! With miraculous facility these stomachs have become case-hardened, and receive with impunity, ounces of Nitre, and Hamiltonian purgation!! Which have received this curious transformation, the stomachs of the patients or the brains of their doctors? The large doses of Nitre, however, thus safely given, completely refute all objections to its use in Hæmoptysis drawn from its supposed poisonous properties; and we trust that physicians who have from timidity been accustomed to refrain from its use,

will cease to debar themselves from the employment of so valuable a therapeutical agent. We might go on to enlarge upon this part of our subject, and develope the antiquity of many new remedies, other than those already noticed; for it would be an easy matter with *Dunglison's New Remedies*, and an *old* Dispensatory before us; but we refrain, that we may pass on to remark a little upon those remedies which are neither new nor true, and therefore, no remedies at all.

Every day from every corner of the earth, some physician may be heard crying Eureka! Eureka!! and by the combined influence of ambition, vanity, self-delusion, and an incapacity for observation, adds to the Materia Medica some article, which in his hands, and for some especiality of diseased action, has proved a remedy of thaumaturgic potency. Our medical journals are literally crammed with notices of these new agents; but who, that has relied upon their praise and administered them, has derived the anticipated effect? Not to mention others, of what use as remedies for any thing, are Argilla Chimaphilla, the Magnet, Codeine, Delphinia, and the horde of Lactates? All nearly inert, save in the hands of Turnbull and others of his particular genus. So too, of the Air douche; what remedy ever so vaunted, yet what so valueless? Or to go to a single disease, (Tetanus,) if we examine our Materia Medica, we shall find some forty agents, which as many physicians have declared *specifics;* and yet Tetanus commits as fearful ravages as ever. In this state of things what can the philosophic physician conclude, other than that Cramps had been mistaken for Tetanus, or that each recorder had wilfully misstated; and that consequently the veracity of his professional brethren was entitled to no regard? We have hinted at the causes of this state of things, and named them in the order in which we deemed them most operative; and he who notes them will see that they are for the most part intertwined with our nature, and therefore difficult of removal or curtailment. Yet they must be in a considerable degree uprooted, if medicine is to progress, and become to any extent a certain science.

The same causes, too, are extensively efficient in procuring for remedies really *new*, a greater reputation than their actual capacity for quelling diseased action entitles them. The propensity to tell marvellous stories is incident to humanity. The traveller, often goes no farther than his imagination, for the wonders he describes; the discoverer of a coal-mine is wont to extol its value, and the discoverer of a new remedy is but too often endowed with the capacity of Butler's hero, "whose optics were so sharp, as that he could see what was not." He feels also a parental solicitude that the foundling shall do well; and hence lauds it, ascribing to its influence the cure of *all* diseases in which it was administered, regardless of the powers of other articles, in whose company it entered the system.

At present, Iodine, Nitrate of Urea, Cod Liver Oil, Veratrine, Cannabis Indica, and Valerianate of Zinc, are the subject of medical applause. If the half that is told of them be true, "heroic Calomel," will ere long be shorn of its time-renowned laurels. We have instituted trials of these "noble medicines," but, although exceedingly careful to follow the directions of their admirers, have found that a liberal discount from the number of diseases they are said to cure must be made, ere truth be arrived at. Iodine is doubtless, and we have found it to be, a valuable remedy; but, when we hear that it is to cure Hydrocele, Scrofula' Ulcers, Salivation, Consumption, Syphilis, Leucorrhœa, Dropsy, Cutaneous affections, Incontinence of Urine, the Neuroses, Gout, Chronic Hepatitis and the like, we must be excused for dissenting, for experience compels us to disbelieve. So of the others; all *may* sometimes cure some diseases, but that they are *specifics* in *any*, is not true; neither will they cure a dozen distinct maladies.

Many remedies, we are aware, fail after a time to enjoy the reputation they once possessed, on account of difference of preparation, dose, etc.; but this is not the case with these new remedies. It is the fact, however, with the celebrated Dover's Powders, though even now, they are held in high regard.—*Still, it is not* in our hands, the remedy it was in the days of

Dover and for some time afterward. The reason of this will probably be found when the following (his original formula) is compared with the formula used by the profession generally:—

Take of Opium 1 oz.; Nitre, Tart. Vitriolatum aa 4 oz.; Ipecac 1 oz.; Liquorice 1 oz.

"Put the saltpetre and tartar into a red-hot mortar, and stir till they have done flaming. Then powder very fine, and afterwards add the other ingredients, and mix." This mode of procedure, it will be discovered, differs essentially from that practiced now; and there was also a difference in the dose, which was from 40 to 70 grains, being from 4 to 9 grains of Opium. Yet, astonishing as the dose was, Dover says he has given 100 grains to an adult at a single dose, without any bad results.— Dr. Brocklesby tells us that he cured Chronic Rheumatism with it in a week, giving 30 grains every 12 hours; and that he has sometimes given 100 grains in 24 hours. May it not be, that the reason we do not cure the disease thus quickly with *our* Dover's Powders, is owing to the smallness of our doses, and the difference in its preparation? If so, it may be worth while to return to the old formula; for it seems from our survey, that old medicines, like old wines, are better than the new.

Thus we conclude these disconnected reflections upon Therapeutical agents; and while confessing a fondness for old ways, would hope that there are yet hidden in the womb of Nature, many remedies which shall be both *new* and *true*, and tend immeasurably, to the limitation of the sway of disease and death.

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*Editorial Remarks.*—We have often had it in our mind to write a paper on the topic selected by our correspondent. It would be no difficult task to show, conclusively, that many things for which foreigners have been lately credited, were publicly taught forty years ago by American physicians; and yet the practice has been received as new and very important, because thought to be imported. Not only practical points, but many things in physiology and pathology have been an-

nounced with infinite pomposity, as *new*, that lived before the *modern discoverers* were born; and what is more, they were taught with vastly greater perspicuity.

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## SURGERY.

ART. 4.—Sulphate of Morphine in Strangulated Hernia. By J. J. BRADFORD, M. D., of Augusta, Ky.

On the 14th of March 1845, I was summoned in great haste some fourteen miles, to operate in a case of Strangulated Hernia. My friend, Dr. John Corlis, who had first been called to the case, found the tumor about the size of a goose egg; very firm and tender to the touch, and tne patient suffering the most intense agony. Being a young man, stout and fleshy, he was copiously bled, and every means of the Taxis had recourse to, but without avail. The necessity for a surgical operation was now deemed urgent, and for that purpose I was called to the case. As the patient's sufferings were of the severest character, and as several hours would elapse before my arrival, Dr. Corlis administered a large portion of the Sulphate of Morphine. Some two hours after this dose had been taken, the Doctor again examined the tumor, and found that the most remarkable change had taken place. The tumor could now be handled with very little pain or tenderness; it was soft, and readily yielded to slight pressure, escaping into the abdomen.

Upon my arrival, I found our patient entirely comfortable, and even cheerful; he nad no pain; had taken a nap; spoke with feelings of gratitude for the important relief he had obtained, and anticipated being upon his feet again in a very short time.

The Inguinal rings were carefully explored, as well as the Inguinal canal, and no vestige of intestine or omentum could be detected, either by sight or touch. The handling of the parts also, communicated no pain or tenderness.

Such was the condition of our patient at this time; and so favorable indeed, were his prospects, that neither Dr. Corlis nor myself doubted for a moment, that a rapid and safe recovery would ensue.

A liberal portion of Ol. Ricini was administered to open the bowels; and we left our patient quite comfortable. But twelve hours from the reduction of the bowels they had not been moved by the medicine, and the patient was now seized with the most violent abdominal pain. The abdomen became largely distended, accompanied with great tenderness; the pulse accelerated; the heat over the abdomen augmented; and the pain, retching, vomiting and hiccup, truly distressing. Venesection to the extent of sixteen ounces, warm fomentations over the abdomen and a repetition of the purgative medicine was had recourse to, but all without accomplishing our aim.

On the 18th I again saw our patient, and the unfavorable symptoms still persisting, or rather, having become so greatly aggravated that but little hope remained; and no action having taken place upon the bowels, we determined to try the croton oil, aided by frequent injections. We gave him two drops of croton oil, in a little emulsion, followed in two hours by injections; and these means were persevered in during the following night, without producing any other effect than an aggravation of our patient's sufferings.

Under these circumstances, and with prospects almost utterly hopeless, we resolved to change our whole plan of treatment. Our aim now was, to subdue pain; allay all spasmodic action; and to trust to time and the efforts of nature for success. To acsomplish a part of our purposes, the sulphate of morphine in half-grain doses every half hour was given, until the patient's system became sensibly narcotised, when the dose was reduced to half a grain every hour. No other treatment, with the exception of cooling mucilaginous drinks and injections of Slippery Elm, was adopted. Under this plan our patient became more composed, and on the morn-

ing of the sixth day from the injury, had several copious stools, followed by very great relief.

The safety of our patient, however, was not felt to be established with the opening of the bowels; a severe bronchial affection ensued, which threatened to carry off our patient, whose sufferings had already exceeded any thing of the kind that I had ever witnessed. I will not take up space in detailing the treatment that was adopted in this last affection, as my friend Dr. Corlis managed the case almost exclusively from this point, until his ultimate recovery. Suffice it to say, that he had every attention that kindness and skill could afford.

Two or three very interesting enquiries present themselves in the history of this case, viz: What was the nature of the mechanical obstruction, that thus prevented action upon the bowels for six days, notwithstanding, they were part of the time under the influence of one of our most potent cathartics? Secondly; how became the bowels liberated after all active means were withdrawn? Thirdly; what connection had the bronchial affection with the severe peritoneal inflammation that followed the reduction of the bowels?

The first inquiry I propose to answer in the following manner: It is evident that the omentum must have been pushed in advance of the bowels; and the severe spasmodic action that existed for fourteen hours at the internal ring, (which is formed by the transverse fascia) caused the peritoneal coat of the omentum, and the peritoneal lining of the bowels to unite by adhesive inflammation. Thus, both might be returned into the cavity of the abdomen together, leaving no external protrusion whatever. The cessation of pain no doubt depended upon the relaxation of the fibres of the fascia transversalis.

The second inquiry must also be answered by assigning a mechanical cause. If a portion of intestine or bladder be partially embraced by ligature, and the balance of the bladder or bowel forcibly distended by gas or air, the part within the ligature will be liberated thereby. This I have since verified by actual experriment. Such, I apprehend was the true

cause of the liberation of the strangulated portion of bowel, in this case. For, it will be recollected that all active purgative means had been withdrawn for forty-eight hours before, and that the bowels were enormously distended with gas.

Should this view of the case be thought unsatisfactory, there is but one other that is tenable, viz: that the stricture remained at the mouth of the sac, which is formed by the peritoneal lining of the transverse fascia. This latter view is untenable, from the fact that no pain existed at that point, more than any other part of the abdomen; nor was any sense of stricture, contraction, or tightness experienced in the right inguinal region, after the return of the bowel, notwithstanding the most violent straining and efforts at vomiting.

As to the third inquiry. viz: "what connection had the bronchial affection with the case?" we suppose that there must have existed a strong tendency to that disease before the reception of the injury; and that the violent peritoneal inflammation which ensued, served to keep it in abeyance during the early part of the attack. For, it is to be remarked, that no symptoms of bronchitis manifested themselves, until the subsidence of the peritoneal inflammation.

Such, Mr. Editor, is a brief history of one of the most interesting cases of Hernia that it has ever been my lot to be called to; and should you deem the facts in the case, together with the pathological views advanced, worthy of perusal, I would be glad to see them published in the Lancet.

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P. S.—Since the above case was drawn up I have examined three cases in "Braithwaites Retrospect;" two cases of Femoral Hernia, by David Bell, of Carlisle; and one of Inguinal Strangulation, by Dr. A. W. Davis, of Presteign. In all these cases, it will be seen that the Taxis failed, and that operations were deemed necessary previous to giving the morphine, which, by its relaxing effects, saved the patient, not only from danger but also the extreme suffering of a fearful operation.—Should *succeeding efforts* with morphine be crowned with

similar success, it will be found that Surgery will be shorn of some of its horrors, and the interests of humanity eminently promoted.

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## Art 5.—*Conservative Surgery.*

To preserve a member of the body which has been the subject of injury, is a far higher exertion of Surgical skill than to amputate it with the greatest mechanical dexterity, celerity and science. The *operation* gives *eclat* and causes but little trouble to the Surgeon; while the *conservative treatment* often requires much time and diligence, and entails a great deal of labour and anxiety; and the successful result is not in a proportional degree rewarded by popular applause.

It is not to be wondered at, therefore, that most, especially young Surgeons operate too frequently, and that the welfare of the patient is sacrificed to the fame of the operator.

"It must be confessed, there is something imposing to the uninformed or inexperienced mind in the flourish of a cutting instrument enlisted in the cause of science. Its use implies something of boldness, of hardihood, and at least a certain portion of knowledge in the operator. It is an obvious, a tangible, remedial agent, whose effects are seen, unlike that of the most skilfully devised or powerful medicine, the mode of operation of which is hid from us. It is repulsive to the feelings of all, whether mere spectators or patients, when applied to the human body, and therefore creates not merely awe, but terror; and he who wields so formidable a weapon comes in for a share of these emotions, in addition to that portion of professional credit which is fairly due to success."

"It is scarcely, therefore, surprising, if some from temperament, some from questionable motives, and some from the ex-

citement it occasions, resort to its use more frequently than others. But this disposition should be restrained; and has, in fact, been very much checked by the advance of *Conservative* Surgery within the last twenty or thirty years."

* * * * * "The precept cannot be too often enforced, that the knife is not the first resource of Surgery, but the *last*."

These reflections were suggested by a case recorded in the *London Lancet*, (March 1845. Amer. reprint; p. 234.) treated and recorded by James Prior, Esq.; Roy: Naval Hospital, Woolwich, Eng., which must be considered one of the greatest triumphs of *conservative* Surgery of modern times. We have space for only a brief abstract of the nature of the case and of the treatment.

"Dec 9.'43, half past 11, A. M.—E. E——, aged 34, laborer in the steam-boiler factory of the Royal Dock Yard, at Woolwich, whenwinding up a weight of some tons, (the flue of a boiler,) by means of a crane, the chain supporting the weight suddenly broke, the handle of the machine was made to revolve violently the reverse way by the falling body, and in doing so, struck him unexpectedly on the under side of the left arm at the elbow joint, producing so severe an injury that he was brought at once to the Naval Hospital, with a view to ulterior measures.

"On examining it about an hour an a half after the accident, I found a large wound on the under surface of the joint, occasioning a general disconnection of its parts—muscular and otherwise—except immediately in front. All the ligaments also were obviously torn asunder; the heads of the radius and ulna were driven wholly from their situations, upward and forward, on the humerus; the condyles of the latter bone, and part of its shaft, to the extent of two and a half or three inches, projected from the wound behind, at nearly a right angle with the forearm, and so thoroughly denuded of all ligaments or muscular attachments, as to draw from one of the gentlemen who had first seen it, the observation, that he could scarcely have

cleaned it so thoroughly by a quarter of an hour's work with the scalpel. The head of the radius, I was informed, had been at first partially exposed, and the olecranon was said to be fractured. Hæmorrhage had now pretty well ceased; considerable portions of lacerated muscle hung from the wound.—Altogether, the injury seemed so formidable, and so little short of actual dismemberment, that I was not unprepared for the opinion of our medical officers, who had previously seen it, that the limb could not be saved.

The first object being to reduce the dislocation in order to see what further remedial means might be used, the extreme severance of the parts enabled me to accomplish this without difficulty or assistance. No enlargement of the wound was necessary to return the protruded humerus to its natural position; the muscular substance was likewise replaced, and the brachial artery and nerves of the arm seemed uninjured; and two fingers introduced into the joint could trace no fracture, though the olecranon had at first been considered broken. With the bones replaced as nearly as possible in their natural positions, I found sufficient integument, though torn, to cover them, by nice adaptation; and this decided me on attempting the preservation of the limb. * * *

"The skin was therefore drawn as closely as possible, without the assistance of sutures; a pledget of lint dipped in the blood, was applied over the wound; a second, and longer one, to keep its edges more firmly together, over these a few turns of a roller; the whole supported by a padded splint, resting on pillows. A moderately flexed position only was given to the limb, from finding that a greater degree of bend was likely to stretch the lips of the wound, and consequently interfere with their union. Upon the system the shock had been obviously great. The pulse was down to 60; countenance pale, anxious and depressed; and a tremor he could not conquer—though evidently a man of resolution—pervaded his frame.—An anodyne was ordered with the constant application to the limb of the following lotion:

Rectified spirit six ounces; solution of dinacetate of lead half an ounce; water twenty ounces. mix.

The patient had been invalided from the Royal Marines, two years previously, for scrofulous disease of the glands of the neck, a fact calculated to damp considerably any sanguine hope of success.

By the proper use of anodynes, nauseants, aperients, local and general bleeding, local applications to the limb and the appropriate diet, the patient was well enough in somewhat more than six weeks from the occurrence of the accident, to walk about the ward, with his hand supported by a paste-board splint and a sling.

* * * "The arm was gradually brought into use.—Liniments, frictions, steaming, warm-bathing, &c., were freely used. Before quitting the hospital, March 22, he could swing a weight of seven pounds with the injured limb, and had even attempted one of fourteen pounds. He was discharged again to the Dock Yard from which he had been received; has resumed his station in the factory, and continues there at work with a very efficient limb, which daily improves in freedom and power."

When the patient was last seen by the Surgeon "He showed his arm, with many strong expressions of gratitude, and said exultingly, that he could swing a sledge-hammer with it of fourteen pounds weight."

The case, as detailed in the original paper, is full of interest, and exhibits clearly the patience, perseverance, and varied resources of the Surgeon who reported it.

## BIBLIOGRAPHICAL NOTICES.

ART. 6.—Urinary deposits, their diagnosis, pathology, and therapeutical indications. By GOLDING BIRD, A. M., M. D. Assistant Physician to, and Lecturer on Materia Medica, at Guy's Hospital; &c., &. 11mo. pp. 323. London, 1844.

From the study of the different characters presented by the Urine and its deposits, under the various circumstances of health and disease, much light will doubtless be thrown upon many obscure points in pathology, which will render diagnosis and therapeutical applications, in many cases, more correct, and consequently more simple and efficient. This field of investigation has, however, been as yet but very imperfectly explored, and hence peculiar difficulties lie in the way of the practitioner when he resorts to the renal excretions for the elements of his diagnosis.

The design of the present little work is to supply a deficiency which has been sensibly felt by every one who has undertaken to study the indications of the urine and its deposits; viz: a manual of convenient size, having "its contents arranged so as to admit of ready reference," which will enable the practitioner easily to discover the *nature* of a urinary deposit, and succinctly point out its pathological and therapeutical indications; and, as the author too modestly adds,—"fitted to act in the humble office of pioneer to more elaborate, and more diffused sources of information."

This design is most completely filled up in the treatise before us; the work containing not only a succinct and well-arranged view of the present condition of knowledge on this subject, but, having been prepared by an author who has himself contributed most materially to that knowledge; is replete with the result of his own laborious researches made at the bed-side, and conducted in all the lights of modern science.

We therefore commend this work to all who wish to make themselves acquainted with the subject of which it treats, and as a very useful accompaniment to the more fully practical treatises of Dr. Prout and Sir Benjamin Brodie. We think that some one of our publishers would promote his own interest, as he would that of the profession in this country, were he to bring out an American edition of this manual of Dr. Bird.

Examinations of the urine or of its deposits cannot be profitably made by the practitioner unless he is enabled to make them with very little labor or expenditure of time, and at the bed-side of his patient. He cannot carry on a lengthened chemical analysis; but the tests which he employs must be few and simple, or they will at once lose their applicability in his hands. On this score the methods of examination pointed out by Dr. Bird, are just as they should be.

"The only apparatus and reagents required for these investigations at the bed-side, are—

A gravimiter, made small enough to float in an ounce of fluid; red and blue Litmus paper; a test-tube, and watch-glass; Nitric acid.

All these are easily arranged in a little case; and can thus be always at the convenience of the practitioner. For the microscopic examination of the urine, a vertical instrument on a firm tripod, and a large ring-stage, provided with a good half-inch acromatic object-glass, is alone required."—p. 24.

The gravimeter is for the purpose of ascertaining the density, or specific gravity of the fluid; a matter of some import in the diagnosis and treatment of several diseases. For this purpose this instrument is absolutely indispensible, as an ounce vial in which to weigh the fluid, will enable us to ascertain the same fact, by comparing its weight with that of an equal volume of pure water.

By means of the litmus paper the acid or alkaline condition of the urine is to be ascertained; and the test-tube, watch-glass, and the nitric acid are employed to detect the presence of al-

bumen, and that of an excess of urea, as well as to determine the character of a number of occasional constituents.

By the employment of the simple microscope, Dr. Bird has given great simplicity to the diagnosis of the different forms of urinary deposits; and with the aid of his descriptions and of the figures, representing their microscopical appearances, which he has given in his book, these various deposits may be discriminated without resorting to a delicate and often difficult chemical examination.

This method of examination and these figures are peculiarly valuable to the practitioner, who, while he may often find it of great utility to be able to ascertain the true condition of the urinary deposits, is not often prepared, nor at leisure, to submit them to chemical analysis.

A brief description is also given of the new method of M. Bouchardat, of detecting the presence of sugar in diabetic urine, by means of its action on polarized light. The ordinary mode of ascertaining the presence of this substance in the urine is to concentrate it by evaporation, and, by the addition of a little yeast, to cause it to undergo the vinous fermentation; after which it yields alcohol by distillation, which is a proof of the previous presence of sugar. Another method is to evaporate the fluid, and clarify it with animal charcoal, acetate of lead, &c., and thus obtain the sweet substance in the form of crystals or of impure syrup. But in the new method, a certain amount of the clear urine is placed in the tube of a simple piece of apparatus, figured and described by Dr. Bird, and by its action on polarized light, the presence or absence of sugar is at once determined.

The obscurity which has always rested on the nature and physiological relations of the renal excretions has now been, a considerable extent, removed, by means of the improv processes of chemistry. It is now pretty certainly ascertain that while it is the duty of the kidneys to remove from the ci culating fluid a large proportion of the water taken with t food or in drinks, they also eliminate the greater part of t

saline matters of the constantly changing tissues of the body; of which, while the lungs throw off the greater part of the carbon and hydrogen, the kidneys discharge, in the form of *urea*, the principal proportion of the nitrogen.

This peculiar crystalline substance, urea, may be considered the most important constituent of the renal excretion. More than half an ounce of it is discharged by a healthy man, in the course of twenty-four hours; and every sixty grains of urea contain twenty-eight of nitrogen.

It has been pretty satisfactorily proven that the nitrogen which is necessary to the constitution of the animal body, is not obtained directly from the atmosphere, but derived from the food taken into the stomach. All kinds of nutritious food contain nitrogen; animal food contains it in largest proportion, while some forms of vegetable food afford but an exceedingly small amount, and certain *pure* vegetable principles, as oil, starch, gum and sugar, hold in their composition no appreciable quantity. The urea derives its nitrogen, it is believed, either directly from the digested food, or secondarily from the decomposing or changing tissues of the body. Thus the nature of the food will affect the quantity of this substance in the urine; whilst the use of purely non-nitrogenous food, or entire abstinence from any food, will not cause its total absence from that fluid. A proof that as long as vital motion goes on, changes, decomposition, and the renewal of the tissues of the body must take place, giving carbon and hydrogen to produce vital heat by combination with the oxygen supplied by respiration, and furnishing the nitrogen and the saline elements excreted in the urine.

A knowledge of the relations of the elements of the urine to the food must be of considerable importance in the treatment of various diseases. Let us instance disorder or disease of the kidneys, in which, those organs failing to perform fully their natural functions, the urine is either scanty in quantity, or of very low specific gravity, containing much less than the normal quantity of urea and of its other natural constituents.

Under these circumstances, dropsy, in its various forms, seems to accumulate in the system. The fluid of dropsy is found to contain urea; the blood is largely contaminated with that substance; and if the kidneys are not caused to resume their appropriate functions, drowsiness occurs, followed by complete stupor, coma and death.

In cases of this kind the knowledge of the relations of the various kinds of food, to the proportion of the urea and other constituents of the urine, could doubtless be made of great practical value. Certainly those kinds of food which cause the smallest production of these matters would be indicated under these circumstances. In this relation we will quote from the author before us.

"The influence of the composition of food on the quantity of urea, is beautifully shown by the late experiments of Dr. Lehman,* of Leipsic. This philosopher examined the quantity of urea secreted by his kidneys whilst living for some days on a strictly animal diet, as well as when he restricted himself to vegetable food, to a mixed diet, and to one quite free from nitrogen, consisting of starch, gum, oil, sugar, &c. The mean weight of the urea obtained from the urine of twenty-four hours, under these circumstances, is expressed below in grains.

| Diet. | Animal. | Vegetable. | Mixed | Non-nitrogenized. |
|---|---|---|---|---|
| Urea in the urine of 24 hours. | 819:2 | 346:5 | 500:5 | 237:1 |

No one can avoid observing the great disproportion existing in the quantity of urea found in Lehman's urine, and that generally met with; the quantity secreted whilst confined to a strictly non-azotised diet, nearly equaling the normal proportion. Still, whatever may be the idiosyncrasy of the ingenious experimenter on this matter, the results of his researches

*Simon's Beitrage Zur Physiol. und Pathol. Chemic und Microscopic. Berlin, 1843, B 1. S. 190.

prove to a demonstration, the influence of food in modifying the proportion of urea separated by the kidneys."—p. 34.

Our limits will not admit of an extended analysis of the contents of this work of Dr. Bird's; we will therefore be content with laying before our readers a few interesting extracts; and first, of the relations existing between the functions of the skin and those of the kidneys.

"As a general rule, whenever the functions of the skin are impaired, where a due amount of secretion is not exhaled from the surface, an excess of nitrogen is retained in the blood, and ultimately separated by the kidneys in the form of urate of ammonia, or perhaps urea. A person in apparently good health, experiences from exposure to a current of cold air, a slight check to perspiration, and the next time he empties his bladder, he voids urine of a deeper color than is usual with him, and on cooling it becomes turbid from the precipitation of urate of ammonia. The explanation of this phenomenon, is found in the kidneys assuming temporarily a kind of compensating function for the skin. It is true that uric acid, or urate of ammonia, is not naturally expelled from the surface of the body, but certain organic matters, rich in nitrogen, certainly are; and if their proper emunctory, the skin, has for a time its functions arrested, they are probably filtered from the circulating mass by the kidneys, in the form of urate of ammonia. That nitrogenised products are exhaled from the skin is indubitable. Dr. Faraday calcined pure river sand, aud on heating it with hydrate of potass, it yielded no trace of ammonia. On merely passing this sand over his hand, and then treating it in a similar manner, ammonia was evolved. A piece of ignited asbestos, by mere pressure between the fingers, absorbed enough of some nitrogenised organic matters to evolve ammonia when heated with hydrate of potass."

"From a series of careful observations, Seguin* ascertained that, on an average, eleven grains of matter were exhaled from the skin in a minute, equal to 15,840 grains, or 33 ounces, in

*Memoirs de l' acad. des sciences. Paris, 1790.

twenty-four hours. Consequently the amount of perspired matter very nearly equals the urine. The exhaled fluid was afterwards examined by Anselemino,* who found that it contained on an average .88 per cent, of solids; and 100 grains of this solid extract contained 22:9 saline matter. Hence in the course of 24 hours the skin exhales

| | |
|---|---|
| Organic matter, | 107:47 grains. |
| Saline matter, | 81:92 |
| Water and volatile matter, | 15650:61 |
| | 15840: |

This organic matter contains much nitrogen, and I have more than once detected in it a body resembling urea. Berzelius† states that osmazome, another nitrogenised substance, is an ingredient in the perspired fluid. It may safely be assumed, that when the skin is unable to perform its functions, the 107:47 of organic matter, which then lose their proper outlet, appear wholly or partly in the urine in the state of urate of ammonia."

"As already stated, this occurs when the kidneys are healthy; but if organically dtseased or merely in a state of congestion, or at most sub-acute inflammation, as in the dropsy after scarlet fever, they simply pour out albumen, the vital chemistry of these organs being too far depressed to allow of the conversion of this substance into a body normal to the kidneys; hence, in the disease in question, the disappearance of the albumen, and presence of uric acid in the urine, become valuable indications of convalescence. Dr. Marcet‡ was the first who suggested that interference with the functions of the skin might in some way account for calculous deposits." p. 77.

It will be recollected that Dr. Osbborne, in his work "On the nature and treatment of Dropsical diseases," attaches great importance to the restoration of the functions of the skin. He goes so far as to say, in speaking of dropsy with albuminous

*Tiedemann's Zeitochrife, B. 3, S, 321.
†*Traiti de chimic.* Paris, 1833. T. VIL p 327.
‡*Marcet on calculous disorders.* 2d edition. London 1819. p. 186.

urine, that he has "never failed in removing this kind of general dropsy *whenever the active surface of the body was restored to a perspiring condition.*" The italics are his own.

These facts accord with others stated by Dr. Bird, in giving his treatment of the uric acid diathesis.—p. 89.

"1. *Attention to the function of the Skin.*—The remarks already made on the effect of an arrest of perspiration furnishing a pabulum for the formation of a deposit, or by retaining in the circulation a substance capable of rendering uric acid insoluble, show the the necessity of attending to this indication. I have repeatedly seen diaphoretics, warm clothing, the use of a flannel, and in winter, even a chamois-leather waistcoat, with frictions by means of a flesh-brush or hair-glove, repeatedly remove a deposit of uric acid gravel, and in more than one instance, where even an hereditary taint existed from gouty or calculous progenitors. The observations of Dr. Wilson Phillip* have shown that the proportion of uric acid in the urine is notably diminished by the use of active diaphoretics. It is also possible that the extreme rarity of calculous affections in the Navy might be partly explained by the kind of vapor-bath in which sailors sleop, "the lower decks being the part allotted to repose, the ports are for the safety of the ship necessarily closed at night, and the temperature of the surrounding air is therefore so exalted that the place becomes a kind of steam-bath from animal exhalations; the men being literally immersed in their own perspiratiou." These are the remarks of Mr. Copland Hutchinson,† who, in allusion to the rarity of calculus among sailors, adds that from 1800 to 1816, upwards of one hundred and twenty-six thousand men were employed in the Navy. Of these, nine-tenths had been employed at sea from a very early period of life. But eight were affected with stone. It appears probable that three of these were affected with calculus before entering the service. So that taking all the cases

*Dr. Wilson Phillip on Fever, p 494—583.

†Med. Chir, Trans. 1818. Vol, ix. p 443.

in the Navy in the period above mentioned, it cannot be said that more than one in thirty-four thousand were the subject of calculus." p. 89.

Among the remedies which act as solvents of uric acid we find *borax*, and the *phosphate of soda*, noticed in the following terms:

"Uric acid is soluble in a solution of borax, the biborate of soda,—more so, indeed, than in alkaline carbonates. and this salt may be taken for some time, at least by male patients, without producing any very injurious constitutional effects, and readily finds its way into the urine. On this account its administration has been suggested in cases of uric acid gravel, but it has not been much employed in this country. In women, this drug cannot be employed with impunity, as it certainly exerts a stimulating action on the uterus, and I have seen it in two instances produce abortion.

"The remarkable solvent action of phosphate of soda or uric acid, to which Liebig has lately directed attention,* inspires a hope that its administration may be of use in cases of calculous disease, by impregnating the urine with an active solvent. All that is required to insure this drug reaching the urine, is to administer it in solution sufficiently diluted; one scruple to half a drachm might be administered in any vehicle, as in broth or gruel, as when diluted, the phosphate tastes like common salt, and few persons object to its flavor. I have administered this drug in two very chronic cases of uric acid gravel, and in one, with the effect of rapidly causing the disappearance of the deposit." p. 97.

These excerpts will be sufficient to give the reader an idea of the nature of the work and the style of the author.

*London Medical Gazette, Aug. 1844.

ART 7.—Strictures on the use of the term *Congestive*, as applied to low forms of Fever, with some general observations on the pathology of those diseases. By ISAAC PARRISH, M. D. Read before the Philadelphia Medical Society, session 1844—5.

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This well written paper was published in the April number of the American Journal of the Medical Sciences, but is now sent forth by the author in pamphlet form.

We have been in the habit for years of teaching, that the fevers called *congestive*, were made so by bad treatment, at least in very many instances. Hundreds of pupils will recollect our urgent appeals to them for the vigorous treatment of remittents, by the free use of Sulphate of Quinine during the remission and the disuse of drastic cathartics to cleanse the tongue and remove abdominal and other imaginary congestions. We insisted that the cathartic practice late in fevers, and the neglect of tonics, laid the foundation of hundreds of cases, called *congestive*, and which often terminated fatally. We knew this to be true.

It has fallen to our lot, to read many Theses on congestive fever by candidates for graduation. And without at all intending to disparage the writers quoted by Dr. Parrish, we have no hesitation to say, that we have read several descriptions of the congestive fever of the far South, that please us better than those referred to in the article before us. We remember two, especially, written by practitioners of from seven to seventeen years experience, as in point. These gentlemen regard the disease as eminently congestive, and yet we have not discovered any more decisive proofs of congestion, than are to be seen in all pernicious or malignant intermittents or remittents.

We believe Dr. P. is fully sustained by the facts, in the comments made on the symptoms of congestive fever, as announced by the gentlemen quoted as authority. Thus:

"The above assemblage of symptoms indicates a highly ma-

lignant and mortal disease, of an intermittent type, occurring in a miasmatic district, at a season favorable for the development of this poison, and ceasing on the occurrence of frost.—The description here detailed will be found quite analagous to that given by authors, of the malignant or pernicious intermittent of warm climates—sporadic cases of which are occasionally seen in this latitude, or occur in persons just arrived from the South. It is now known as congestive fever.

"The only difference between this form of the disease, and that described by other observers, is, I think, in the type, and perhaps in the degree of violence. In the other varieties, the disease comes on more gradually, with that feeling of malaise which precedes the ordinary remittent fever; the symptoms of remittent being afterward developed, and suddenly assuming, at the end of four or five days perhaps, an alarming aspect which determines its true character, and gives it the title of *congestive.*"

We feel quite confident that a good deal of error remains to be corrected in the South on this subject. We are forced to this conclusion by the statements furnished (and by respectable men too) of the success of opposite modes of treatment, in what are alleged to be precisely the same conditions of the system. There has not been a sufficient amount of discrimination, and to this may also be added an unhappy tendency, too common for the honor of the profession, as well as for its success, to be under the supreme influence of theory. Let medical men resolve to be more accurate observers; to see facts as they are; and we shall be the last to complain that they exercise their rational powers to turn the facts to the best account.

We cannot close these remarks without quoting from the Edinburg Medical and Surgical Journal, vol. 12, p. 148, the following remarks, which were directly applicable to the profession in the Middle and Eastern States forty years ago, and which do not less forcibly apply to many parts of the country now, if *congestive* and *typhoid* be substituted for *typhus.*

"*That cabalistical* word Typhus, I verily believe, has slain

its thousands. Every body is now convinced, how improperly the term was affixed to the endemic fever of the West Indies: that it is applied with more propriety to the majority of fevers in our own country, is to me by no means clear. The fever is apt to be hastily pronounced *typhus;* and this sentence once passed upon it, typhus it must be; consequently from day to day, the *name* of a disease is prescribed for, with due solemnity and skill." The *true disease* is lost sight of in the homage paid to the *name,* and if the patient recover, no thanks to his Doctor. Should he die, the terror of the *name* is the apology.

By the way, Dr. P. does not appear to be aware of a novel doctrine taught in the West, not long since, touching congestion of the abdominal organs. We think he should be informed of all the light attempted to be cast on this subject; and therefore apprise him that the discovery has actually been announced, that *irritants applied to the skin do really increase the severity and danger of internal congestions.* In the simplicity of our hearts, we had supposed, in common with ninety-nine hundredths of the profession, that the direct opposite is true.—But the march of mind is said to be onward, and none can tell where it will stop.

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ART 8.—CHRISTISON on Poisons, part 2d;—republished by Haswell & Barrington, Philadelphia.

In our last number we noticed part 1st of this excellent work. We have since received the concluding portion, and although we perceive some omissions in regard to facts published in this country, we are free to say, that it is the best book on the subject, in the English language. As such we commend it to all physicians who desire to understand the nature, treatment and tests of poisons.

ART. 9.—COPLAND'S Dictionary of Practical Medicine. Edited by Charles A Lee, M. D., &c., &c. Part 5.

CONTENTS.—Delirium with Tremor. Difficult Dentition. Diabetes. Diagnosis. Diaphragm. Diarrhœa. Digestive Canal. Disease, Dropsy. Dropsy of the Abdomen.

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This work enjoys a high reputation in Great Britain, and we are pleased to see a reprint in this country. Professor Lee has made some very judicious additions, constituting the whole an excellent library of practical medicine. It is issued in monthly numbers at fifty cents, and will make four large volumes when completed. Physicians who desire to have well-furnished libraries, will do well to call at the Book Store of Mr. C. Marshall, on Main street, and subscribe for it. The enterprising publishers, Messrs. Harper & Brothers, of New York, are entitled to praise for the superior style in which the work is executed. Part 6th has been received and is equally worthy of praise.

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## MORE BOOKS.

Mr. C. Marshall has loaned us the following valuable works. in advance of the same, ordered no doubt by the publishers for us, but not yet received.

Esquirol on Insanity, with notes by E. K. Hunt, M. D.

Guthrie on the diseases of the Urinary and Sexual Organs.

We shall notice these books more particularly in our next.

In addition to the above, Mr. Marshall has for sale the new work on practice, by Professor Dickson, of South Carolina. It is from the Charleston press, in two large octavo volumes, and is creditable to the publishers. We hope to be able to notice it more fully hereafter, when our copy is received.

Dr. Dickson's [London] Chrono-Thermal System of Medicine, is in the press of Redfield, Clinton Hall, N. Y., and is *looked for daily.*

# THE WESTERN LANCET.

LEXINGTON, JUNE, 1845.

*Large doses of Sulphate of Quinine.*—A controversy has been carried on for some time in the Boston Medical and Surgical Journal, on the propriety of large doses (10, 20, 30, 50 grs.) of Sulphate of Quinine.

In the May number, is a short article by Dr. Van Buren, of the U. S. Army, from which we quote as follows, and give it our most cordial endorsement:

"In the miasmatic regions of the South and South-west, and in constitutions depressed and debilitated by exposure to the miasmata, and the excessive and continued heats which characterize those regions, it has been found, by the experience of certain Medical officers of the Army, that intermittent fevers have been arrested with more certainty and success, and without any bad consequences, by the exhibition of sulphate of quinine in doses of 10, 15, and 20 grains, immediately after the paroxysm of fever; that in remittent fevers, a similar mode of administration of the remedy is not merely preferable, but absolutely necessary to *cut short* the disease; that in pernicious intermittents, and that form of disease known as congestive fever, no other remedy than quinine—and not even quinine in smaller doses— will, in a majority of cases, save life; and lastly, that among the thousands of cases treated in this manner there is no observation on record of injurious effects from the remedy, other than those ordinarily experienced in the usual mode of practice, although the attention of the medical officers has been particularly directed to this point."

We teach publicly, that it is infinitely better for the patient to encounter the cerebral distress, occasionally supervening the sulphate, than to have his frame shattered by a repetition of paroxysm.

To prevent the latter, should be the *grand object* in view; and this can be done and should be done promptly by the bold use of the salt of quinine. If the patient cannot or will not swallow it, denude the arms and epigastrium, and apply a cerate containing from 50 to 150 grains of this salt. The cerebral distress so much talked of, rarely follows the endermic use; and we cannot but regard the physician who will not resort to this expedient, as being decidedly in the rear of the profession. The constitutions of patients have suffered severely, and even irremediably, from prejudice and scepticism on this point. We attended several thousand cases of intermittent and remittent fever, of all grades, from 1820 to 1826, and speak confidently from abundant experience. Nearly twenty years ago we wrote a paper on the superior efficacy of the sulphate of quinine, which appeared in the *American Medical Review*, conducted by Professors Eberle & McClellan. We had previously relied on arenical remedies, but the prejudice against them led to the trial of the quinine salt. From that time to this, our confidence in the article has continued to increase; and we close this short note by affirming, that we never had the timely charge of a case of intermittent or remittent fever, that was not manageable by the right use of this agent. We know it to be a more prompt and certain remedy than any other in use, and we believe it to be equally safe. We may hereafter present a monograph on this subject.

In reaching our conclusions on this point, we have had *facts* even to superfluity, but these have only stimulated the use of our reasoning powers to adapt the remedy to individual cases. For we hold *facts* to be of no value in medicine, apart from the *true inductive* philosophy; and it will be found that those in general who profess to rely exclusively on what they call the *facts of the* science, have never been, to any considerable extent, *practical* men. We do not know a single exception.

*On the Sale of Poisons.*—The London Lancet for April 1845, has a good article on the sale of poisons, which we would be glad to copy if we had space. We give the pith, however, by stating, as we have often done elsewhere, that a heavy fine should be inflicted on every apothecary, found guilty of vending any actively poisonous agent, excepting by virtue of a written order from a physician. All County Courts should take this matter into custody, and adopt such measures as will give due protection to life and health. If there is no legislative enactment on the subject, the sooner we have it the better. As the matter now stands, the vilest negro in the land can buy enough arsenic to kill 20 persons, for nine pence.

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*Is the Negro subject to Hare-lip?*—This may seem to be a question of no importance, and yet we feel desirous to ascertain the truth in the premises. Of the thousands of negroes we have seen in slave and free States, not one, of any complexion, had hare-lip. We have conversed with gentlemen who have resided years in Slave States, and their observation coincides with our own. Here and elsewhere, the deformity forces itself upon us, very frequently, but it is exclusively confined to the whites. Is this disparity in the races general throughout the United States; and if so, is there a philosophical reason for the difference? We put this inquiry to the profession at large, and very respectfully solicit their attention to it.

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*Per-acetate of Iron with an excess of base, as a remedy for Arsenical preparations.*—The hydrated per-oxide of iron is of admitted efficacy in cases of poisoning with uncombined arsenious or arsenic acid; but according to the experiments of Duflos, it is quite ineffectual when these acids are combined with

bases, as for example, Fowler's solution, or arseniate of potash; which last is frequently employed in calico printing, and is, consequently, easily procured.

In the uncertainty in which the practitioner may be placed as to whether the arsenical poison be free, or combined, it is very important to administer the oxide of iron in such a form as to produce a favorable result; to this end it is convenient to employ the per-acetate of iron.

This compound may be prepared by adding to the hydrated per-oxide of iron obtained from the decomposition of four parts of liquid per-chloride of iron, three parts of acetic acid, of density 1:06, and sufficient water to make up sixteen parts.

This liquid, which is a solution of per-acetate of iron with excess of base, precipitates arsenious and arsenic acid from all their solutions, either free or combined with any base; 500 grs. of it are sufficient to decompose 1880 grains of Fowler's Solution.

This result demonstrates that liquid per-acetate of iron (with an excess of the base) merits preference in case of poisoning by arsenical compounds. It should be remembered that its power is more rapid in proportion as it is more diluted with water; besides which, large dilution prevents all irritating action of the acetic acid set free.—*Jour. de Ch. Med. No.* 1844.

(The mode of preparing the above compound is not clearly stated, for the strength of the liquid per-chloride of iron is not given. It may be presumed that per-acetate of iron mixed with per-oxide is to be employed; the degree of excess of the latter is of little importance, and the strength of the per-acetate is limited by the employment of four parts of acetic acid of 1:06 made up to sixteen parts with water, and this, it appears, is to be largely diluted before it is exhibited.—*Editor.*)

*Lond. Edin. and Dub. Philos. Mag.*

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ERRATA.

**Page 81**, seventh line from the bottom, add *not*, after the word *is*.

**Page 85**, first line, add after the words "under these circumstances, d[illegible]ay in its various forms" the following; *appears, and the effect[illegible] matters seem*

# THE WESTERN LANCET.

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## Art. I.—FOREIGN CORRESPONDENCE.

London, June, 1845.

The general state of the Medical profession of London, I would say, is not remarkably harmonious, although many instances of good feelings exist even among rivals. The great distracting cause is the *Medical Reform Bill;* and this, like most other reformations so much *talked of*, will, in all probability, end in discussions without any practical results. This question of reform is especially agitated by the *general practitioners*, with Mr. Wakley for their champion. The general practitioners are regularly educated Surgeons, many of them being members of the Royal College of Surgeons, but they do not rank as high as the pure Surgeon or the pure Physician. The College, therefore, contends that they are not entitled to the distinction of its more regular members, and that a reformation is demanded. There exists, also, another class of practitioners below the general practitioner, these are the Apothecaries, who dispense medicine, visit patients and prescribe. The general practitioner, also, frequently keeps a shop and dispenses medicine.

No small degree of acrimony, it may well be supposed, is engendered between the general Practitioners and the Surgeons, or more properly the *College* of Surgeons. Each party claims the precedence, *as a class.* It is contended by the Surgeons, that the general Practitioner is incompetent as a *Surgeon;* that the very nature of his *general* pursuits necessarily prevents him from becoming a skillful Surgeon, and that he should not rank as such.

On the other hand, it is contended with equal zeal by the general Practitioners, that the *Surgeon* is the incompetent party; that, from the very nature of his education and practice, he is forever to take a purely surgical view of cases, and therefore, he too frequently neglects the pathology of the general system, and the requisite *medical treatment* connected with important operations.

There seems, in truth, to be some ground for the opinions held by the general Practitioners, whether the main question involved in the scheme of reform be right or not; and to those who are unaccustomed to the arbitrary divisions of the profession into Physicians and Surgeons, it will readily occur, that important advantages will arise from a union of medical and surgical qualifications.

It must not be presumed, however, that English Surgeons are ignorant of pathology and therapeutics, especially the former; but the great difficulty consists in what is probably the fact, that habit, and a necessity of practicing a single department, unavoidably induces a disposition to rely on the one and neglect the other. It results from this state of things, that surgical cases are often treated without due reference to the conditions of the general system, or the adoption of proper therapeutical means preparatory to great operations, or for the purpose of superseding them. It is important however to bear in mind the distinctions between surgical and general pathology; the former, perhaps, will be carefully observed by the Surgeon, while the less obvious but equally important derangements of the general system are measurably neglected. *Local* remedies, therefore, will take the precedence over those of a general character.

These remarks do not apply alone to English Surgeons, but on the contrary, they have an application almost co-extensive with this important department of the profession. It is true, however, that no country more imperatively demands a reformation, in this particular, than England. Here, from the pernicious influences of a vast consumption of gin and malt liquors, combined with deficient and unwholesome nutrition, confined and ill-ventulated habitations, and a constantly damp atmosphere, it is the rarest occurrence to find a sound constitution, especially in hospital cases. Chronic diseases, especially of the kidneys, liver, stomach and heart, are exceedingly common; and this, it is a reasonable conclusion, constitutes the great necessity for preparatory treatment.

To what extent the general Practitioners may be actuated by a sincere desire to improve Surgery by increasing the importance of medical pathalogy and therapeutics, is not quite clear; it is certain, however, that some very extraordinary attacks are made upon the Surgeons under the pretext of advancing medical reform. It is probably this state of ill feeling between the parties, that has been the cause of a recent attack upon Mr. Liston, in relation to the notorious Gosport duel case.

In a duel between two British officers at Gosport, one of the parties was wounded by the ball entering the abdomen and injuring a small artery. The case progressed for some days without any very materially adverse occurrence, until an aneurismal tumor became manifest in the lower part of the abdomen. Mr. Liston was now called to the case, and he decided on the propriety of tying the external iliac artery. That operation was accordingly performed, and the patient died of peritonitis.

A writer, who states that he was called upon in a professional capacity, to attend the *post mortem* examination of the body sums up the testimony given before the Coroner, to this effect: Drs. Allan, Mortimer, and Stewart, and Mr. Jenkins, all of whom were in attendence upon the patient, except the first, were examined before the Coroner, as to the cause of death; these gentlemen testified that the operation performed by Mr. Liston was rendered absolutely necessary by the aneurismal tumor, but that there was no necessity for great haste in performing it, and that the patient died from the effects of the operation. Dr. Allan testified that such aneurismal tumors were frequently cured by absorption, still he regarded the operation as necessary. It is contended by the writer, that the artery was a small one, "a superficial branch without a name," that the patient possessed great obesity, the operator having cut through "full five inches of flesh;" that if the tumor had burst, death would not have immediately followed; and finally, that, with the chances of compression, and other local means, the operation was precipitately performed, and that it necessarily must have proved fatal. The writer thinks that Mr. Liston himself, evinced some scruples about the propriety of the operation, for he hesitated between the propriety of tying the external iliac and the wounded artery itself, and that after the operation was commenced, he was nearly relinquishing it, in consequence of the great obesity and other difficulties.

Some account of the case was published in the *London Lancet*, justifying the operation. And in consequence of the attack in the newspaper, and the assumption that this case was evidence of the incompetency of the pure Surgeon, Mr. Liston has been induced to reply, *through the same medium*, and as his remarks may not find their way to the *Medical* Journals, I copy them: he says:

"*To the Editor of the Times:*—Sir—You have thought proper to bring my practice before the public in some articles on medical reform, and in connexion with the case of the late Mr. Seton. You say that "the reasons which induced me to take the pure surgical course in preference to that which medical surgery would have pointed out, requires explanation." This I am very ready to give.

In the first place, permit me to refer you, for a correct account of the case, to the *Lancet* of this date; from which it will, I think, appear to well informed medical men that some step was required to be taken, and that without delay, in order to arrest the flow of blood into the tumor.

This, I fearlessly assert, could not have been effected by pressure, as the writer of the articles in your paper seems to suppose. The nature of the tumor, and its situation, rendered this method absolutely impracticable; and any attempt of the kind would have added immensely to the danger and difficulties of the case. Allow me to remark, that the great and important distinction between a *spontaneous* aneurism, (from a diseased vessel, a circumscribed tumor often of slow growth,) and a *false* aneurism, (not well bounded, extending and disposed to extend rapidly, and even to pour in its contents externally,) has been, some how, very strangely overlooked.

As to the treatment of aneurism by pressure, this plan, revived very lately, and recommended in a modified form by a Dublin Surgeon for cases of aneurism of the ham, has been resorted to with success only four times in this country. Of these four cases, two were under my care; then came one treated by Dr. Allan, of Haslar Hospital; and one by Mr. Greatrix, Surgeon to one of the Regiments of Guards. This method, however, it is well known, is applicable only where a portion of sound artery can be found betwixt the trunk of the body and the anerismal tumor.

The tumor in Mr. Seton's case, lay in the groin, above the fold of the thigh, and in a great measure over the muscles of the abdomen. If

pressure could have been applied, surely I was as likely to have employed it as any other Practitioner.

It was the opinion of the Surgeons in consultation, and after the most mature deliberation, that the operation could not, with safety, be delayed for even one day. The tumor was steadily increasing, and some thought that it had enlarged considerably during the few hours which elapsed betwixt the consultation on the night preceding the operation and the morning of its performance. Had it passed a little higher, even the ligature of the vessel could not have been practised.

The insinuations as to the motives which induced me to proceed to the operation might have been spared.

You persist in contrasting the education of the Surgeons with that of the general Practitioners, and in assuming that the information and judgment of the former must be far superior to that of the latter.

My professional education, I may be permitted to say, was equally full in all its branches with that of any physician or general practitioner whatever, with the addition perhaps, of a somewhat longer hospital attendance, and a little more extended study of Anatomy and Pathology. I expect that I have a full appreciation of what you call "Medical Surgery," and that I know as well how to take means to avert and do away with the necessity for an operation as to perform it when it is absolutely required."

The whole of this attack is looked upon as a piece of malevolence. The object has not been to expose an instance of malpractice, or to advance science by eliciting any new fact or principle; on the contrary it is evident, that a disposition has been manifested to take advantage of an unfortunate case, such as might occur in the hands of any Surgeon, and to publish it to the world, in a *common newspaper*, for the sole purpose of advancing party interests. These newspaper attacks upon members of the profession, evince not only a want of high toned professional feeling but also a willingness to accomplish objects irrespective of means.

It is still a very prevalent practice in London to operate for malignant disease; and notwithstanding the results are unfavorable, yet they seem to be practically disregarded. I have examined with some degree of care numerous preparations of a malignant character, in the Pathological Museum of Guy's Hospital, and upon referring to the Inspection books, it is very common to find a record that the patient sub-

sequently died of cancerous disease of some other part. I enquired of one of the most accurate pathological anatomists here, if he would advise operations in cancerous affection; he replied, that all he could say was that the Surgeons of London would usually operate. He was, however, opposed to the practice. There are some exceptions to this course. Mr. Liston informs me, that he was opposed to operating in cases of a clearly malignant character.

Dr. Walshe is preparing a new and enlarged edition of his work on Cancer. He stated to me that he should dwell still more emphatically on the constitutional character of Cancer, and thereby exhibit the impropriety of operations with the view of curing these affections. The influence of this treatise will probably exert a beneficial effect upon the minds of Surgeons in this particular.

The hospital practice of medicine in London, and to a considerable extent the private practice also, is widely different from the course commonly pursued in the United States. A course of practice which with us would prove successful, would necessarily be fatal here from its very activity. I was somewhat surprised to witness inflammatory affections healed with comparatively but little bleeding. Perhaps one small bleeding and a subsequent cupping will be the extent of depletion in a case of pericarditis or pneumonitis. Blistering, however, is a favorite remedy, and is freely employed.

There is evidently a growing tendency in the British profession to discard blood-letting in the treatment of inflammatory diseases.—Whether this practice will be ultimately established as a general principle may be questionable. If future exprience shall prove that inflammations can be subdued with more certainty without bleeding, it will undoubtedly be regarded as a desirable event; but should it eventually turn out that the success is more attributable to improved means of diagnosis and the advancement of therapeutics in a general sense, than to the mere absence of blood-letting, the aspect of the question is materiallly altered, and it would at once become a serious enquiry how much greater success would attend the joint influence of sanguineolent depletion. That bleeding should be tolerated here to a less extent than in the United States, is not surprising; and that tonics and stimulants should find an extensive and appropriate application, is what might be anticipated from the habits and other modifying circumstances that so powerfully influence the constitutions of the inhabi-

tants of London; and hence it is that iron, quinine, porter, wine &c, are frequently employed, when an American physician would resort to depletion.

Another important modification in English practice, and one that will be looked upon with some degree of distrust by American physicians, is the limited extent to which Calomel and other mercurial preparations are employed. We find, as in the case of blood-letting, an increasing tendency to avoid the use of calomel, especially to the extent of ptyalism; mercurial preparations, however, are frequently employed, but in small portions and for a limited period, suspending it immediately upon the supervention of the slighest mercurial action.—In the formidable disease of pericarditis, in which we rely so much on bleeding and mercury, the latter is often employed here very sparingly; and if these remedies are resorted to at all, they are speedily followed by tonics and nutritious diet.

Dr. Forbes remarked, in a conversation upon this subject, that great leading methods of practice were often regulated more by fashion than any other circumstance; that the British practitioners, having formerly depleted largely, were now coming back to a better position, resorting to depletion, or instituting perturbating treatment less frequently than at former periods. And that having recieved the mercurial practice from America, it exerted a great influence for a time, but is now gradually falling into disrepute; and he predicts the same results, in reference to bleeding and the use of mercury, among American physicians. He thinks the present course is an improvement on the opinions formerly held.

I have elsewhere expressed the opinion, that the use of mercury, especially in the treatment of fevers, was to some extent the result of habit; that education, and the constant influence of surrounding examples tended more to perpetuate an almost indisciminate use of calomel, than any positive indication for its employment. It is not a fit occasion, however, now to discuss this question, and I will only add, that there are undoubted circumstances existing here which forbid the use of mercury, that are not operating on patients in the United States. I refer to the debilitated and broken down constitutions so commonly met with here; and also to the great prevalence of diseased kidneys, all combining to forbid the extensive employment of mercury. It cannot be doubted, I think, that the mercurial preparations constitute

one of the most important classes of remedies, and that they admit of extensive application in the treatment of diseases; but at the same time it must be conceded, that these powerful agents are often too indiscriminately applied, resulting in injury instead of benefit.

With reference to blood-letting I cannot refrain from remarking, that it is, beyond all doubt, a remedy not to be dispensed with in the treatment of American phlegmasiæ; that *early* and prompt depletion constitutes our most potent remedy; and it is not improbable that the views of medical men here are vibrating to an extreme that may not be beneficial in the end.

There is no chronic disease more common in London than that of the kidneys. The predominance of this affection is undoubtedly attributable to the cool and moist climate, but more especially to the large quantities of gin and malt liquors consumed by the lower classes. But few bodies are examined which do not disclose more or less disease of this organ. The kidney disease is not perhaps so frequently destructive, per se, but that it often leads to fatal results through the intervention of secondary affections. Thus in "Bright's Kidneys," it is common to find as a complication sub-acute serous inflammation, and extensive dropsical effusions.

A very common, and at the same time serious complication of kidney affection, is disease of the heart. The disease of the heart, however, is sometimes found to be a cause of the kidney disease; in consequence, therefore, of this mutual re-action these affections are very often found associated.

When the kidney becomes the originating cause of morbus cordis, the latter is induced in consequence of albumen being eliminated by the kidneys, which greatly attenuates the blood; and this attenuated state of the blood, as was long since proven by physiological experiments, offers an impediment to its free passage through the capillaries, and their condition offering an impediment to the heart's action, dilatation, hypertrophy or valvular disease, according to individual circumstances, may be the consequence.

It is also true, that obstruction in the heart will produce engorgement of the liver and kidneys, often organic disease of the latter, though differing in its characteristics from "Bright's Kidney," the disease presenting the appearance of a coarse, somewhat granulated structure — Hence it is, that mercurials and diuretics can be advantageously employed in these cases.

Medical Schools in London are numerous, one being attatched to each of the principal hospitals. The most popular of these are, Guy's, University College, St. Bartholomew, St. Thomas, King's College, St. George's. These institutions are usually well organized, that is they embrace all the branches necessary for a thorough medical education, including the following: Medicine, Materia Medica and Therapeutics, Surgery, Anatomy, General Anatomy and Physiology, Pathological Anatomy, Chemistry, and Midwifery; about three lectures will be delivered by each lecturer during the week. Full courses are not delivered in the summer, but lectures on special departments are given several times a week. Clinical instructions in Medicine and Surgery are given at most of the institutions. The summer lectures are attended by a very limited number of pupils, indeed there are comparatively few students in London during the summer. I have been present at a lecture on Pathological Anatomy when *five* constituted the entire audience; and also at an exceedingly interesting clinical lecture, one of a regular course, on diseases of the heart, with pathological demonstrations and reference to cases in an adjoining ward, when but *three* were present—but two regular pupils being in attendance.

Very few American physicians visit London; indeed, I am not aware of any one being here at this time except myself. I cannot but conclude that the advantages offered by London are greatly overlooked by our countrymen who go abroad. If the object is to investigate any particular department, the most ample opportunities are presented; but those who have no special object in view will be likely to divide their attention too much, which will result in a very general, superficial and unsatisfactory view of things and condemnation of the whole. The *materials* are here, and it rests with the investigator to combine them according to his individual views and necessities. Pathological Anatomy, Physical Diagnosis, and all other specialities may be investigated very satisfactorily, provided the proper means are adopted.

At a future time I may speak somewhat more definitely in relation to several points of interest.

L. M. LAWSON.

## PATHOLOGY AND PRACTICAL MEDICINE.

Art. 2.—*Congestive fever, as it appears in Alabama, by* F. L. Meriwether, M. D. *

*Congestive fever,* in my opinion, is a malignant form of intermittent or remittent, wherein the action of the heart and all the vital powers are so much weakened by a depressing agent, (miasmata if you please,) that the stage of excitement or reaction cannot be completely and fully developed; consequently instead of an increased temperature of the skin, it is greatly decreased beyond the natural standard, with a weak, irregular and accelerated pulse, hurried and distressed breathing, with rigors and sometimes severe and long continued chills. The tongue is moist, with a thin, white fur upon it; the patient is restless, and has considerable thirst. This stage has no definite time of duration, generally lasting from one to six hours, before a partial reaction takes place, and in some very malignant cases, re-action never takes place, the patient perishing in the first paroxysm. But, usually, there is a slight glow of heat upon the surface, which lasts but a short time before the body is bathed in a profuse perspiration, continuing until another paroxysm comes on, which generally recurs within twelve or twenty-four hours. In some cases, the second or third chill closes the scene, unless timely means are used to arrest its progress. The patient continues to sweat profusely; the evaporation of which, and the accumulation interiorly of blood, produce a marble coldness of the extremities, and a sinking of the pulse with great restlessness, heat about the epigastrium and abdomen, with incessant thirst; the patient complaining of burning up interiorly, while at the same time his skin feels cold. In some cases we find stupor and a suspension of the senses; but generally, the mental faculties are undisturbed, until life

* We insert a part of Dr. Meriwether's inaugural thesis, on account of its pathological views, and the successful use of the cold dash. This gentleman attended his first course of lectures in Transylvania, in 1827; and after practising largely in Alabama for 17 years, returned in 1843–44, to receive the honors of the School. The balance of the thesis is devoted chiefly to the use of large doses of the sulphate of quinine.

becomes extinct. The stomach in the first stage is generally irritated, but, afterwards, it becomes torpid. The patients will swallow any kind of medicines to act on the bowels, and realise no gastric uneasiness therefrom; the stomach appearing to have lost its usual vitality, which is evinced by a gurgling noise heard when any kind of fluid is swallowed. Hence, it is on this condition of the stomach and bowels, that mammoth doses of cathartic medicines are frequently administered, as we hear of, without any sensible effect upon the bowels. In persevering in their use, there results still further depression of the system, by inviting a greater quantity of blood to the already engorged organs; hence, the torpor is increased, and they never can effect the object for which they are administered. If they act at all, they do not bring away bilious discharges, but serous ones, which never fail to hasten the dissolution of the patient. There is a serous blue discharge produced by an indiscreet use of cathartic medicines, well known by physicians who have treated many cases, as the *indigo discharge*, which is a very unfavorable indication. The secretions, in this condition of the system, are all suspended for want of an equilibrium in the circulatory system. Now, to change this condition of the system, is the chief indication of the physician. The most fashionable mode has been that adopted by Doctor Armstrong, of London, which consists in stimulating externally with hot water, hot air and rubefacients; at the same time employing internal stimulants of a diffusible character, aided by opium and calomel, with special reliance on opium and the heated air bath. Besides this plan, Doctor McIntosh. of Edingburgh, recommends, in exalted terms, the use of the lancet, as an auxiliary in establishing reaction during the administration of the stimulants.—The above plans of treatment will succeed in a majority of mild cases. But there are some cases entirely beyond their reach, that can be saved only by a different procedure. I am well convinced of this. I have seen the stimulating plan used, and used it myself, and had the misfortune to witness so many signal failures, that I was induced to abandon it. I am well acquainted with a physician of high reputation, as a man of talent and skill in his profession, in Green county, Alabama, who pursued the stimulating and cathartic practice, and lost, during one summer's practice, about thirty cases of congestive fever. I have often seen him literally skin his patients all over with his remedies.—And I am confident the stimulants, both internally, and externally,

hastened their dissolution. He has come to the conclusion, that congestive fever is an incurable disease.

After reading Doctor Russell's experience in the use of *cold water*, I determined on giving it a fair and impartial trial, in the first cases that might come within my observations. I very soon had ample opportunities of testing its efficacy; and my most sanguine anticipations of its success were realized. But, at the same time, I used other very potent febrifuge remedies; such as the sulphate of quinine, calomel, and camphor, cupping, &c., but am disposed to believe that they would be entirely inefficient, in many cases, without the cold water, and vice versa. Doctor Russell remarks: "That the debility in collapse, the consequence of one or two violent fevers, is unlike that which supervenes upon the close of a protracted disease. In the latter instance, there is real exhaustion of the vital powers, and appropriate stimuli are called for to replenish and sustain them; but in the former, the strength is often astonishingly great; the patient is able to rise at pleasure, from his bed, to change his position, to throw himself from place to place; in fine to control, at will, every muscle of his frame. There is, therefore, no *real* debility, but a mere state of oppression, occasioned by an unnatural collocation of the fluids."

The internal organs are over loaded, being forced to contain and to circulate the blood that belongs to the vessels of the exterior, and they are unequal to the task. They have been goaded into increased action by an unnatural supply of their appropriate stimulus, until the excitability is impaired, so much as to be insensible to its impressions. The effects of diffusible stimuli would be to send a still further supply, and hence tend directly to increase the oppression. The rapid manner, in which the powers of the system are often observed to decline, upon their exhibition, goes very far to strengthen this view of the subject.

The vascular system has powers independent of the heart, and if those powers are subdued, the heart must necessarily supply their functions, which never could have been intended by nature, and of course is impracticable. To renovate those powers, then, is the leading indications in the judicious management of collapse, which must be done, not by calomel, but by agents that act more directly upon their source. It is a physiological truism, that the circulatory system is dependent upon the nervous for the performance of its functions. We may hence infer that the influence of the latter is not properly developed in collapse;

or that being affected by itself, it is unable to execute its office. Any agent then that can arouse its energies, bids far to be a useful therapeutic instrument in the diseases which owe their existence to its derangement. I know of none so efficient as *cold water*. If there be one article in the materia medica that is entitled to the appellation of *specific*, under any circumstances, that one is cold water, in the collapse, following the malignant intermittents of miasmatic regions. I pretend not to arrogate for it so proud a place, for I have no confidence in specific remedies; the idea is absurd, *because neither disease nor constitution possess any uniformity*; * but a success has attended its use under extensive trials, which has been unparalleled. So far as I know its application in this stage of fever originated with Doctors Fearn and Erskine of North Alabama, who have had the best opportunities of testing its efficacy. They have enjoyed an extensive practice for many years, in a district where disease is unusually violent, and where the affection now under consideration, is very common; and they pronounce *cold water*, an agent decidedly superior to all others that they ever employed. The mode of applying it is as follows: The patient is stripped entirely, and ten or fifteen gallons of the coldest water that can be procured, are quickly dashed over him; he is then wiped dry, and placed to bed. This course is pursued even if there be not strength to enable him to sit up and submit to it; which bye the bye is very unusual, as the muscular strength is generally well sustained. It has been before stated, that the surface is cool; hence the shock imparted is inconsiderable, as it depends upon sensation, and sensation is in the ratio of the caloric extracted. It is important this should be borne in mind, as it may remove apprehensions, in regard to the propriety and safety of its use. Instead of creating any unpleasent agitations, it at once composes the restlessness of the patient. He is no longer harrassed by irritation, but balmy sleep, "natures best restorer," oftentimes closes the period of his sufferings. The system begins to react, the cold sweat which was profuse, ceases; the skin gradually recovers its warmth, the pulse slowly rises, becoming less frequent and more expanded. But this favorable state of things does not usually continue long, in the majority of cases, before the sweat again

*A more palpable truth was never uttered; and yet a late writer has attempted to show that the phenomena or facts of life and disease, are as clearly marked and stereotyped, as the facts of natural science!!!

makes its appearance, and with it, the other unpleasant symptoms. No sooner do these recur, than the remedy is again applied, and with like happy consequences, as before. We regard the sweat, referred to, as the grand indicator of the physician; it governs him in the administration, or repetition of the remedy. How often he must recur to the affusion, cannot be foretold; one application is sometimes sufficient, but most frequently more are acquired. I have sometimes had to use it four or five times, during twenty-four hours; but, in a majority of cases, once or twice will suffice. I have frequently seen patients so much exhausted, that they were not able to sit up and receive it; but had to be laid upon a cot on the floor, yet as soon as they were wiped dry, were able to walk to the bed without assistance. But if the collapse is allowed to remain undisturbed until the debility be *real*, instead of *imaginary*, I do not believe cold water nor any other therapeutical agents, that has yet been tried, will succeed in restoring the lost balance of the system."

After the happy effects of the cold dash, as stated by Dr. Meriwether, were procured, he administered ten grains of sulphate of quinine every two hours, either alone, or combined with calomel and camphor. The main design of this practice, was to prevent a repetition of paroxysm, and it succeeded. Several cases are detailed to illustrate the plan of treatment.

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## OBSTETRICAL MEDICINE.

ART. 3.—*Case of Hæmorrhage after delivery, attended with alarming syncope and great prostration:—Communicated by* N. V. BAILEY, M. D., *Lawrens C. H., South Carolina.*

I was called upon in great haste, sometime ago, to attend a female servant, the property of a neighboring planter, whose case corresponded with the above description. As soon as I arrived and had made proper inquiries relative to the patient, and the circumstances of her situation, I was informed by her attendants that she had been favored with a remarkably easy labour, and had been delivered of a very large child about an hour previous to my visit. They remarked, however, that the child, instead of being delivered in a natural way, had almost floated away from the mother by the profuse discharge of blood that

occurred about the same time, but that she had been threatened with nothing of the kind previous to this. They likewise informed me that she had lost, in this way, about two quarts of blood. As soon as I had learned this, I directed my attention to the patient herself, whom I found in a most dangerous situation. The bleeding from the uterus was still profuse, the placenta was retained, and the uterus had ceased to act. She complained of great weakness, and appeared to be in pain. Finding that the patient's life depended on the employment of prompt and effectual means, I resolved to take away the placenta if possible. Accordingly, I laid hold of the funis, while with the other hand, I made friction on the abdomen. As soon as I did this, the uterus began to act, but the after-birth still remained firm in its attachment. The case now put on a more alarming aspect. The hæmorrhage still continued unchecked; the uterus refused to act any longer, and the cord, either in consequence of its slight attachment to the placenta, or because it had been roughly handled by the two midwives in attendance, was separated from the placenta; the surface of the body was cold, and the forehead covered with a clammy sweat. The patient complained of singing in her ears, and a mist before her eyes, the whites of which were turned up as if she were in a dying state. Every four or five minutes, she seemed to faint away completely, and was, at times, with dificulty aroused from the state of stupor into which she had fallen. During these fainting paroxysms, she seemed to undergo distinct convulsive motions, which I regarded, however, as the result of debility, or an effort of nature to drive the blood back to the centre of circulation. The patient being now in a critical state, and the pulse most imperceptible at the wrist, I considered that the hæmorrhage must either be speedily arrested or the life of the patient pay the forfeit.

With this view of the case, I determined to make another effort to rid the womb of its burden. This, I knew, however, I could not attempt without inducing artificial strength. Having, therefore, given stimulants (such as camphor and brandy) pretty freely, I introduced my hand into the uterus, which enabled me at once to ascertain the point of attachment between the uterus and placenta. I found, on examination, that the placenta was high up and attached to the fundus uteri. With some difficulty, I inserted my fingers beneath its edges, but to my great disappointment, only a portion yielded to my efforts. This, however, did not deter me from pene-

vering with the means which I considered requisite as well as necessary. I persisted, and at length succeeded in removing the cause of evil. The placenta on inspection presented the appearance of having been macerated, or placed between two solid bodies and exposed to the influence of pressure. I then ordered the patient to be made comfortable, and small portions of stimulus to be given at certain intervals. In the evening when I visited her, I found every thing as well as I could expect, the discharge ceased as far as it was consistent with other circumstances, and the patient complained of nothing but a headache, which though slight at first, afterwards increased so as to become very violent. Thinking that it might be occasioned by the stimulants which I had so freely given, I endeavored to direct the blood towards the bowels by cathartic medicines. Still this afforded but temporary relief. The pain after a while became just as violent and constant as before. For a time, I did not know what plan to pursue. I applied counter-irritants behind the ears, and to the nape of the neck, but this likewise proved useless in the end. I then submitted the case to a more careful and rigid examination. The pulse afforded but little or no satisfaction, the eyes were sensible to light, but the pain, I could slightly perceive was of a more darting kind, and more severe at one time than another. I then concluded that it was more of a nervous character, and accordingly made up the following mixture, a table spoon of which was to be given every two hours:—Sulph. quinine, 5 grains—acet. morphine, 1 grain—aquae font. 8 oz. In the meantime, I kept the bowels open by mild cathartics, as calomel and rhubarb, castor oil, &c. As soon as she had taken four or five doses of the mixture, she was relieved, and in a short time, recovered her health entirely.

May 21, 1845.

## DENTAL PATHOLOGY AND THERAPEUTICS.

ART. 4.—*Remarks on Premature Decay of the Milk Teeth, by* M. ROGERS, M. D., *Professor in the Ohio College of Dental Surgery, at Cincinnati.*

While medical literature abounds in treatises on the effects of teething, upon the health and well being of infants and children, much less has been said upon the diseases incident to the deciduous teeth than their importance demand. From the fact that they are so soon to give place to the permanent teeth, very little attention has been paid to them, and the fact not well understood that they are liable to one class of diseases that invades the permanent teeth, and causes such fearful havoc in those beautiful and important organs, that a distinct department of the curative art has been assigned to them—viz: that of *Dentistry.*

That process by which the milk teeth are displaced by the permanent set, when undisturbed by any specific disease, is one that takes place so gradually, and with such beautiful uniformity, that very little irritation is produced, perhaps none to interfere perceptibly with the general health. It is simple absorption of the fangs of the milk teeth by the proximity of the new ones as they advance to perfect the permanent arch, so that, when the new tooth cuts through the gum, the crown of the deciduous falls out of its own accord.

The structure of the milk tooth is substantially the same as the permanent, having its bony body, its enameled crown, its central pulp, periosteum, alveolar investment; and is endowed with most exquisite sensibility.

Passing over the diseases that invade the gums and teeth between the periods of the first and second dentition, I shall devote the present paper to the consideration of the decay in the crown of the milk teeth, and the complicated diseased condition of the soft parts that inevitably flows from it.

The milk teeth, like the permanent, are liable to be attacked by caries or decay, which speedily wastes their structure, lays bare the nerve, producing tooth ache, inflammation in the socket, abscess in the

gums, with all the train of suffering and constitutional irritation incident to adults, but producing much more severe functional and constitutional disturbance at that tender age.

As in the permanent teeth, the decay begins in any situation where food or other substances of the mouth may find permanent lodgment, such as the little fissures on the surface of the grinders, or at the point of contact on the sides of the teeth.

Different opinions have been advanced as to the causes of decay and its modus operandi upon the tooth, but I believe the latest doctrine attaches it to the chemical action of a corroding agent, probably an acid acting upon the textures of the tooth, producing direct decomposition. My own observations have led me directly and unequivocally to that conclusion. Indeed, the mode of treating caries seems to be based upon such an hypothesis: for filling the tooth is only restoring the enamel or covering to the bony body as if to exclude some destructive agent.

Caries attack children's teeth at any period after they protrude through the gum till they are shed.

I have seen the crown of the central incisors of a child, not two years old, decayed to the gums, with abscesses formed at the roots. It commonly begins at the age of from three to five years. A small speck is first perceptible on the grinding surface, or at the point of contact on the sides of the tooth. The child will first complain of the tooth "hurting" when sweets are taken into the mouth, or from salt, hot or cold drinks, &c. Often the speck has a whitish chalky circle around it, which is an indication of very rapid and dangerous progress of the decay, and it will need the most prompt attention to save it from laying bare the nerve, which is always the sure destruction of the tooth.

In a great majority of cases where the decay is not checked, it lays bare the nerve, and the little sufferer is visited with all the pangs of tooth-ache.

Every time food is taken upon that side of the mouth, pain and suffering are induced. If the disease could be stayed here, it would be bad enough—but it is not so—the continued irritation upon the highly susceptible nerve induces inflammation, which speedily extends to the socket of the tooth, involving the surrounding tissues. The tooth is now so exquisitely sensitive as to cause severe pain by the slightest

touch. In the course of a few months, the nerve dies, which causes *in all cases the destruction of the periosteum at the point of the fang*, leaving a dead, and consequently, a foreign substance at the bottom of the socket, in close proximity with the sac containing the new tooth. In the under jaw, the irritation may be greatly increased by the inflammatory action being very near the fasciculus of nerves and blood vessels passing forward to supply the front teeth.

The gangrene of the nerve, and also of the periosteum, at the point of the fang, establishes an important crisis in the progress of the disease. By the exudatation of lymph into the cellular tissue, a sac is formed around the denuded point of the fang, into which purulent matter is secreted. To make room for the sac, the bony casing of the fang (the alveolus) is removed by absorption. For a time, the action of the absorbants is sufficient to remove this matter as fast as it is formed in the sac, and something like a balance is kept up. The tooth is now very sensitive to cold or heat, is tender to the touch, the child does not use it in mastication, the gum is tumefied, and has a purplish hue. This state of things will often last for months, till a bad cold, or some other disturbance in the system causes an increase of matter to form in the sac too great for the absorbants to remove,—the pressure of the matter in the confined socket of the fang now becomes very great; the periosteum inflames and thickens, which causes the tooth to rise in the socket and exposes it to another source of irritation, by striking the tooth against those in the other jaw every time the mouth closes. The inflammation now increases and extends to the surrounding parts, the cheek and whole side of the face swells, inducing great pain in the jaw, face and head. So much irritation, although local in the onset, excites a severe febrile action, attended with great disturbance in the functions of the brain and nervous system. In the course of forty-eight hours an abscess is formed, and points upon the gum about two lines below the crown of the tooth. After the discharge of thick purulent matter, the pain and swelling of the face slowly subsides, while the abscess continues to discharge freely. For a whole week, the sallow complexion, yellow tinge in the eye, loss of appetite, and nervous irritability show how deeply the whole system has been affected.

The opening of the gum for the discharges of the matter, does not close, but continues to discharge pus, which will be very apparent at any time, by a slight pressure over the abscess. There continues a

fistula on the gums communicating with the sac at the fang of the tooth *as long as the tooth is suffered to remain.*

Every time the child takes cold, there is a renewal of the fever, swelling of the face, and discharge of matter, though the symptoms are milder than at the first formation of the abscess. If the tooth has two or three fangs, there is a sac around each one, but after the fistula is established they generally all communicate with it, having but one opening on the gum. I have seen from four to six of these fistulas over as many teeth in the same mouth of a delicate puny child—a sufficient amount of disease *to keep* it delicate and puny, very certainly.

I had a case in point this morning—a child nine years old, with four of the temporary molar teeth in the condition just described, all so irritable as to cause pain upon the slightest touch with the finger. One of these, the upper molar, was removed; a view of which is here given. Full two thirds of the length of the roots was denuded of the periosteum, the edges serrated by absorption, and the points as sharp as needles.

A close examination of the tooth will show very clearly the reason why it produced so much irritation. The gum adhering about the neck of the tooth would hold its middle portion in its place, while the sharp denuded fangs would move freely by even the ordinary motions of the tongue; thus making the already inflamed parts around the bottom of the socket liable to a continued series of lacerations from the serrated edges and needle like points of the fangs.

It would be difficult to design an apparatus so well fitted to produce irritation as is here delineated. This is not an uncommon case, and may stand as a fair sample of what occurs in almost every day practice.

As might be expected the health of the child was very much impaired, she was emaciated, complexion sallow, skin feverish, and the nervous system very irritable.

The mother, a very intelligent lady, stated that the teeth had been, for two years, very troublesome, causing great suffering upon every occasion of exposure.

As stated above, there was four of these teeth, from every appearance, with their fangs in a similar condition to the one extracted.

Intelligent parents are well aware of the evils flowing from diseases

of children's teeth, and many of them are already prepared to adopt any proper and safe plan for the removal or prevention of these evils. But very few understand that the evils I have been describing arise from decay in the teeth, similar to that experienced by adults, or that they can be remedied in any other way than by removing the tooth when it has become decayed. As far as I am informed, any other practice has been limited to the treatment of few practitioners.

It is not my intention to describe, in detail, the effects these long continued irritations may, and do, produce upon the general health, in developing diseased tendencies existing in the system, or modifying those already present; neither shall I attempt more than to hint at the effects they may have upon the future well being of the individual in the forming state of the constitutional stamina.

## TREATMENT.

The treatment has been to extract the offending teeth when they become too painful to be borne any longer. To this I would simply add, that after the nerve has become bare, so that "biting" upon it causes severe pain, or when severe inflammation is in the socket, or the formation of matter around the fang has commenced, or the gum-bile established, there is no remedy left but extraction; and the sooner it is done the better. All hope of saving the tooth is to be abandoned the moment it is ascertained that the nerve, the central pulp, is exposed; all other curative treatment must be done before this crisis has arrived.

In regard to their *preservation*, two questions may naturally arise: 1st. Can the milk teeth be saved after decay has commenced, and all consequent suffering prevented? 2d. Is it worth while to be at much trouble or expense to save a tooth that in the course of two, three or four years is to be shed?

To the first question I would answer, that in very many cases the tooth can be saved by a judicious operation, and left to the usual process of displacemant by the protrusion of the permanent tooth. Decay commences on the tooth, and progresses slowly, till the nerve is exposed. At any time before this crisis, the cavity can be filled in the same manner as in adults, and with the more certainty of success, as the time is limited to three or four years, that the tooth is to remain.

To the second question, the value of the operation will be sufficiently established by considering the severe and long continued suffering,

hæmorrhage generally recurred. She was unable, on account of the continual burning pain in the post pubic region, the progressive emaciation of her person, and the leucorrhœal discharge, which became constant during the winter, to engage in any of the duties of the family. She passed the summer of 1842 in unmitigated torture. The discharge from the womb was disgustingly offensive, and during the month of August, when she evacuated her bowels, the fœces passed per vaginam as freely as from their natural exit. About the middle of October she was released from her sufferings, and I was permitted to make a post mortem examination. The uterus, rectum and bladder were firmly united together, constituting a mass of indurated matter as large as a half peck measure. Os tincae and the neck of the womb were destroyed—the anterior face of the rectum, and the posterior wall of the bladder, were extensively invaded by ulcerative absorption, and these viscera communicated through the medium of the womb. The coats of the bladder and intestine, were half an inch in thickness, and the body and fundus of the womb, converted into a shapeless mass of disease.

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## SURGERY.

ART. 6.—*False Diagnosis. By* E. L. DUDLEY, M. D., *Lexington, Kentucky.*

The following case is recorded by Professor Stromeyer, in an essay "on the combination of motor and sensitive nervous activity."—"Mrs. R——, about 50 years of age, fell down in November, 1835, and struck the floor with the right nates. She was unable to rise, and could not move the right leg in the least, left, also, nearly immoveable during the first few days. *Paralysis of sensation was absent from the commencement.* She was able to move the right limb, at the hip joint, after the lapse of four weeks, and from that time the *hip was drawn somewhat upwards during the night;—in the morning, the right limb was four inches shorter than the left.* When *standing* on the sound limb, the injured one became of the proper length, still she was unable to stand upon it chiefly because the heel did not feel the ground. Patient complains of acute pain in the knee: buttock of the injured side flaccid—patient unable to produce con-

traction of the glutei, through the influence of the will; could perform rotatory motions of the thigh, slightly bend the knee and move the foot." Now for the explanation! "The total loss of motor power in the right limb, and in the left during the first few days, was the effect of a concussion of the spinal marrow, the consequence of which ceased in a few weeks, but the paralysis of the glutei still remained, which arose from the local contusion and commotion, as well as the imperfect paralysis of the muscles supplied by the compressed and contused sciatic nerves. The psoæ and iliacus could not possibly have been palsied from any other cause than the concussion of the spinal marrow, they recovered, therefore, first. Not being counteracted by the glutei, they drew the hip upwards(!!!) flexed the thigh at the hip, and thus induced, according to my opinion, the pain at the knee."(!!!!)

That Professor Stromeyer with all his learning, and all his fame as a cutter of muscles, should have mistaken so plain a case of fracture of the neck of the thigh bone, is scarcely to be believed. The verriest tyro in the profession should be able to detect such a case at a glimpse. In the name of common sense, we would like for Professor Stromeyer, or Professor any body else, to explain how the contractions of the psoæ and iliac muscles could shorten the limb four inches without a fracture or dislocation of the thigh bone, or by tearing away the superior border of the actabulum—things utterly impossible. Such an idea could only be entertained by one who gravely proposes to cure curved spine, by dividing all the great muscles on one side of the spinal column.

## BIBLIOGRAPHICAL NOTICES.

ART. 7.—*The Elements of Comparative Anatomy of the Vertebrate Animals; designed especially for the use of Students.*—By RANDOLPH WAGNER, M. D., Prof. of Compar. Anat., and Physiol., in the Univer. of Gottingen, &c. Edited from the German by ALFRED TULK, Member of the Roy. Col. of Surg., of England. New York, J. S. Redfield, 1845.—8vo. pp. 264.

This work is very handsomely got up, and supplies, what has long been a desideratum, viz: a cheap elementary treatise in our own language, and we may add, from the American press, containing an accurate summary of the amount of our knowledge upon the Anatomy of the several classes of the Vertebrate Animals.

It is also valuable because it contains many Biblographical references at the end of each chapter, well calculated to direct the student in the further examination of the subjects of which it treats. The utility of comparative anatomy to the student of medicine, need not be insised on in this place. Suffice it to say, that the reputation of Professor Wagner, the fact that this work has already arrived at a second edition in Germany, as well as the evidence afforded by the examination of the book itself, justify us in recommending it as the *best* one extant, among the few *manuals* of the anatomy of the vertebrate animals.

It can be obtained of Mr. Charles Marshall, Bookseller, Lexington.

*Researches on Scrofulous Diseases*, by J. G. A. Lugol, D. M. P., Physician to the hospital St. Louis, chevalier of the legion of honor, &c., translated from the French by A. Sidney Doane, M. D. New York, 1845. Redfield, Publisher, Clinton Hall.—pp. 276.

In 1832, we made a brief review of a work by Lugol on Ioduretted baths, in the Western Medical Gazette, in which we used the following language. "The learned author has shown, satisfactorily, in his first memoir, that the internal use of Iodine, was highly serviceable in Scrofulous diseases; and resolving to push his researches still further,

he has given us the finishing touch of his pen, in the master piece, whose title is the caption of these remarks."

Such was our estimate of the practical instruction contained in the memoir of 1830, that we resolved to test its worth in the Commercial hospital at Cincinnati; and the result fully justified the opinion we had formed.

The volume now before us, is a most valuable edition to the author's former publications. It enters into all the important questions related to Scrofulous diseases, and seems to us indispensably necessary to all who would successfully employ the preparations of Iodine in those affections.

To give some idea of the value of the work, we subjoin a brief outline of its contents. The first chapter treats of the inheritance of Scrofulous diseases, and the health of parents who beget Scrofulous children. The health of parents who have children affected with Scrofula, is next discussed. Here, the tuberculous origin of the disease is analysed, as well as the connexion between Scrofula and pulmonary tubercles. The agency of precocious marriages, as well as that of venereal diseases, in setting up Scrofulous disease, is examined very satisfactorily. The influence of climate and seasons on the progress of Scrofula, is briefly explained. The supposed connexion between vaccination, onanism, menstruation, &c., with Scrofulous diseases, is also treated of. These, and many other points of intense interest to the profession, are lucidly examined, and should be attended to by every practitioner.

The volume abounds with cases of every description, connected with the various developements of Scrofula, and a valuable appendix of prescriptions, closes the book.

Some dozen or more very interesting portions of the volume were marked by us for special notice, but we foresaw that their examination would require more space than our limits would allow, and hence we preferred to invite attention to the whole book, which cannot fail to interest the reader.

Our author has made out several points, very much to our satisfaction, and as we think, beyond the power of refutation. He has shown, that Scrofula and tubercle are essentially identical, and that tubercle, in whatever part of the body, is of the same nature. He has shown that the disease is most frequently hereditary, but that it is sometimes the product of accidental agencies, that impair the constitution. He has

proved, that it is not contagious, nor in any way communicable in the human species, except in the way of procreation. He has also proved, that moist air, and damp localities do not engender Scrofula, though they may accelerate its march.

We think a defect is manifest in that portion of the work which treats of the complication of Syphilis with Scrofula; we allude specially to the treatment. The author has so well described the character of the complication, that we think a quotation may be profitable.

"The union of these two diseases seems to give new force to each; they form together a mixed state, which takes a deeper root in the economy, than either of these diseases separately. This state also presents in other respects, an aspect which soon reveals its double origin. To the skilful practitioner, it is neither Scrofula nor Syphilis, but these two diseases combined. The indication to be fulfilled, evidently comes from the two elements of the disease before us; in these cases we use the Iodine, whatever may be the predomitant symptoms. This special treatment, it is true, is not always successful; but independent of the fact, that we have obtained complete cures by it, this state of disease has generally been so much improved by it, that the treatment by Iodine may be said to be the most advantageous in all cases where Scrofula is combined with Syphilis."—Page 218.

The defect referred to in the treatment, respects the use of Iodine, instead of the proto, or deutiodide of mercury. We find that Dr. L's. patients, were kept under the influence of Iodine for periods varying from four to ten months. The Iodides of mercury seem to be far better suited to the Scrofulo-Syphilitic compound, than Iodine or mercury alone. We have known cases of this kind greatly aggravated by mercurials, which yielded speedily to the Iodides. The protiodide may be given in grain doses, twice a day, in pill. The deutiodide, being more energetic, must be administered in doses of 16th of a grain, in the same way. Both may be gradually increased to quadruple the doses named. It is sometimes advisable, in cases of ulceration, to apply these Iodides in the shape of ointments.

It is rather remarkable, that these preparations were overlooked in the work before us, since they were distinctly named, if our memory serves us aright, in the author's *Essays on the use of Iodine, in Scrofulous disorders.*

The enterprising publishers of Clinton Hall, New York, merit many

thanks for presenting this, and other valuable works to the profession. No physician should be without this interesting volume, which is on sale at Marshall's book store, Main-Street.

*The Dispensatory of the United States of America.* By Geo. B. Wood, M. D., Professor of Mat. Med. and Pharm., in the University of Pennsylvania, &c. &c., and Franklin Bache, M. D., Professor of Chemistry, in Jefferson Med. Col., of Philadelphia, &c. &c. Sixth edition, carefully revised. Philadelphia, Grigg & Elliott, 1845.—8vo. pp. 1368.

This compendious and accurate manual of Materia Medica and Pharmacy, decidedly the best published in America, is justly appreciated by the members of the different branches of the profession. It has accordingly reached its sixth edition.

Although a very thick octavo, closely printed, it is difficult to find any thing that could have been left out to reduce its size.

Among the *novelties* may be pointed out the test for Strychnine, recently presented to the toxicologist, by M. Eugene Marchand, as follows: "If a little of the alkali be rubbed with a few drops of concentrated sulphuric acid containing one-hundredth of nitric acid, it will dissolve without change of color; but if the least quantity of peroxide of lead be added to the mixture, a magnificent blue color will be instantly developed, which will pass rapidly into violet, then gradually into red, and ultimately become yellow." This test is said to be very delicate, but it is recommended to mix the sulphuric acid with one-fourth water. In a mixture of 12 grammes* of milk and half a milligramme† of strychnine, the latter was detected in the filtered whey, by a red reaction, which was at first a little violet.

Among the recent preparations are the *Ferri carbonas saccharatum*, page 956, and *Vallet's Ferrugineous Pills*, page 1065—preparations, in which, by the aid of sugar, precipitated carbonate of iron is prevented from passing from proto-carbonate into the state of sesqui-oxide of iron. A change which always occurs, to a greater or less extent, in the ordinary process for preparing the precipitated carbonate.

The *Tinctura Iodini Composita, U. S.*, composed of Iodine, *half an ounce;* Iodide of Potassium, *an ounce;* Alcohol, *a pint*, is a preparation in accordance with the views of Lugol, and possesses this

*About 185 grains Troy. † .0154 of a grain of Troy.

advantage over the simple *Tinctura Iodini*, that it is not decomposed by dilution with water, and hence may be supposed to be less irritating to the stomach than the simple tincture.

*The Chloride of Zinc*, extolled by M. Cancoin, in a memoir to the French *Acad. de Med.*, as early as the year 1834, after an experience, on his part, of ten years, has not been brought into very extensive notice in this country. This is a little extraordinary, if, as it is asserted, "it acts not merely by destroying the deseased structure, but by exciting a new and healthier action in the surrounding parts;" and "has the advantage of not giving rise to constitutional disorder from absorption, an effect which is sometimes produced by the arsenical preparations."

It moreover produces a thick eschar, when applied in a proper manner, which is made to fall off by the aid of a poultice: while the action of the lunar caustic is somewhat superficial, and that of the caustic potash is rather *solvent* than otherwise, and its deliquescence renders it inconvenient in its application.

"M. Gaudriot recommends the chloride of zinc in *gonorrhœa* in both sexes, as having remarkable remedial powers." p. 1216.

This *national* work needs no commendation at our hands. The very recent date of the publication of the fifth edition, seems to have rendered little change necessary in this.

*Mental Maladies, a Treatice on Insanity, by* E. Esquirol, Physician in chief to the Royal house for the Insane, at Charenton, &c. &c. &c., translated from the French, by E. K. Hunt, M. D.—p. 496—Lea & Blanchard, Philadelphia, 1845.

In no department of science, or philanthropy, has a more decided and beneficial improvement taken place, within the last ten years, than in the management of Insane hospitals, and the treatment of the Insane. We are of the number who think that this happy result is dependent, very much, on the frequent issue and extensive circulation of annual reports, by the conductors of these establishments. The subject, though formerly repelling in its nature, has thus been popularised, by stripping it of mysticism and bringing even its details to the pleasing acquaintance of thousands who never before approached its merits, or studied even the outlines of its history.

The annual reports have served the excellent purpose of pioneers, to prepare the way for a patient reading and careful study of elaborate

treatises, devoted exclusively to the consideration of insanity. Among these we notice, as entitled to the most serious study, the work of the departed, yet never to be forgotten Esquirol. In his own language, we beg to announce, that this book "is the result of forty years study and observation of the symptoms of insanity, the manners, habits and wants of the insane, in the midst of whom the author passed his life."

The arrangement of the work is not, perhaps, as methodical as it might have been, and yet it is doubtful whether more method would have enhanced its true value. It treats of

The Symptoms of Insanity;
——— Definitions;
Causes of Insanity;
Treatment of Insanity;
Hallucinations;
Illusions;
Fury;
Mental Alienation of the recently confined, and of nursing women;
Epilepsy;
Critical treatment of insanity;
Lypemania or Melancholia;
Demonomania;
Suicide;
Monomania;
Mania;
Dementia;
Idiocy—Cretinism.

The advantages of this work to medical men, and especially to conductors of Insane hospitals, consists mainly in the acknowledged skill and science of the author, his record of cases of all forms of insanity, and his universally conceded truthfulness as a reporter. These are the gems of his treatise, and commend it to universal regard.

Our space forbids copious extracts, or we could interest our readers with many thrilling details. We shall content ourselves, therefore, with quoting a few of the author's very judicious remarks on the nature and attributes of the right kind of establishment for the cure of insanity.

Page 76.—"In an establishment for the treatment of the Insane, there must be a *head*, a *single* head, from whom all authority should

emanate. Reil, and those after him, who have insisted that a hospital should be directed by a physician, a psychologist and moralist, had no practical experience, and did not appreciate the inconveniences attending a *division of powers*. When there are *several* co-ordinate powers, the mind of the insane knows not on whom to repose. It wanders in doubt, and confidence is not established. Now, without confidence there can be no cure. A spirit of independence evades obedience when authority is divided."

Esquirol believed the doctrine now so generally entertained, that a competent medical man should be the superintendent and governor of a lunatic asylum. Hence, he observes, page 76, that "the physician, in an establishment of this kind, gives an impulse to every thing; he takes cognisance of whatever interests each individual; he sees his patients more frequently than ordinary patients; is more frequently aware of whatever affects them; interferes in all their dissensions and quarrels, governs them by principles clear and positive, controls their actions, and causes them to be attended by people who are accustomed to the care of the insane."

But while our author insists upon *one head*, he is also an advocate for a suitable number of competent helpers, under the guidance of that head. On page 77, he observes: "Attendants should set an example of deference and obedience to the regulations and *head* of the house. By their numbers, they should present such an array of force as to render its employment unnecessary."

Our American institutions, for the most part, are managed on these general principles, and hence their remarkable success. The medical superintendent selects his assistants, and has the power, virtually, to remove any who are unfaithful or incompetent.

Most earnestly do we desire that this volume may find its way to the library of every reading physician in the country. The subject of which it treats has been too long regarded as obscure and mystical. Not only the physician, but the philanthropist of every name should appropriate some of his leisure hours to this deeply interesting study. We, of the medical profession, have too long and too exclusively restrained our labors to the restoration of physical sanity, never have we fully appreciated the theme that animated, for half a century, the soul of Esquirol. It is impossible that we should overrate its magnitude. Vainly do we sometimes dream of approaching its vastness,

when we speak of it as an eclipse of the sun or of the moon. Alas! alas! the comparison fails, utterly; and, because mind is the noblest product of Almighty power, there is no object with which we can fitly contrast it. What is the most perfect eclipse of the great orb of day, or of the silvery queen of night, compared with the blackness of darkness that enshrouds and fills a disordered intellect? The one is a temporary hiding of the effulgence of a material mass, that is destined to perish in the general wreck of nature. The other is the sad overshadowing of great powers of mind, that, like its author, shall endure when sun and moon shall have emitted their last ray. The one, after the lapse of a few hours, will emerge from the sable vestment that has encompassed it, and be seen careering in all its native majesty and pristine lustre, athwart the azure vault. The other, though now it may be only in a state of partial eclipse, if treated ignorantly, rudely, or with neglect, may, ere long, be mantled with darkness more chilling than the grave, lost to the world, a blank in the universe. Let us beware, how we demean ourselves in reference to this undying emanation from the Deity, this brilliant scintillation from the throne of God. Let us study its history with care, that we may treat it with fidelity and success.

The additions to the original work, made by the American editor, are judicious and appropriate. He might have enlarged very considerably, and perhaps with profit; but he doubtlessly preferred that the great author should speak for himself.

Those who desire to study insanity, in detail, will do well to call at Mr. Marshall's Book Store, on Main-street, and procure a copy of the work thus briefly noticed. It cannot fail to interest the reader who has sufficient mind to understand it.

*Report of the Pennsylvania Hospital for the Insane*, for the year 1844, by Thos. H. Kirkbride, M. D., Physician to the Institution. Philadelphia, 1845. pp. 44.

This excellent home for the Insane is located in a beautiful country, within a half hours ride of Philadelphia. The buildings, farm and arrangements of every kind are eminently suited to the great ends for which they were designed. We have not the pleasure of a personal acquaintance with the medical head of this institution, though we think

we know something of the man, from the perusal of his annual reports, which are sensible and well digested.

The per centage of cures is not equal to that of some other establishments, yet the succes of well directed effort is cheering to the heart of the philanthropist.

We have been gratified to find in this report, a settled purpose to appropriate every rational and accessible expedient, to the attainment of the chief end in view. Thus, the library, pictures, engravings, philosophical apparatus, zoological, mineralogical, botanical, and other collections, form part of the inventory of attracting forces to wean the mind from its wrong bias. The delivery of a course of lectures, too, on topics of natural history, is also to be made an instrument of recovery to the unhappy victim of disordered mind.

Dr. Kirkbride very properly observes, page 42, "that deception is ever to be avoided." Now that we concede the fact, (not recognised in practice some years ago,) that the insane are men and women still, possessed of immortal minds, great even in the ruin that environs them, we presume that no guardian of the insane will attempt to deceive them. They have keen memories, and treasure up incidents that sane persons easily forget. The following is in point:

When a student of medicine, in 1810, I followed Professor B——, twice a week, in the wards of the Pennsylvania Hospital. In the lunatic department was confined a certain Judge B——, of South Carolina, who extorted from the Doctor a promise that in two weeks he would give him a discharge. The importunity of the Judge was irresistible, and the error of the physician was a consequence which soon passed from his memory, while it was deeply fixed in that of the patient. Not a hint escaped from the latter on the subject till the long wished for day arrived. The moment the door of the cell was opened, the promise was laid before the Doctor with all possible earnestness. He denied that such a promise had been given. The Judge appealed solemnly to heaven and the attending pupils, but in vain. The Doctor, far from the possession of that equanimity of temper which might have profited him in the emergency, was highly irritated by the demand of his patient, and spoke roughly to him. The latter, full of the justice of his cause, and vexed by the disappointment, became more furious than ever, and could not be calmed until an orifice in both arms induced complete syncope.

The case of the judge made an impression not to be effaced, and it should teach all concerned, never to practice deception on the insane. And as we have hinted at *discharges* from lunatic asylums, we beg to suggest, that much injury has been inflicted on the character of these institutions, needlessly, by premature discharges. We have heard of one establishment, to which no less than twelve patients were returned in the same year in which they were sent home to their friends, as cured. All this may grow out of the best motives, but it is evidently a defect that should be remedied. We are not the advocates of an improperly protracted confinement; but we think it very desirable that superintendents should err on the side of delay, rather than be too hasty.

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## Art. 8.—EDITORIAL AND MISCELLANEOUS DEPARTMENT.

*National Convention of Physicians.*—In the transactions of the New York State Medical Society, we find the following in reference to a National Convention.

The following preamble and resolutions were presented by Dr. Davis and adopted, and Drs. Davis, McNaughton, and the Secretary, Dr. Van Buren, were appointed a committee to carry out the proposed measure.

*Whereas,* It is believed that a National Convention would be conducive to the elevation of the standard of medical education in the United States, and

*Whereas,* There is no mode of accomplishing so desirable an object, without concert of action on the part of the medical societies, colleges, and institutions of all the states. Therefore,

*Resolved,* That the New York State Medical Society earnestly recommend a national convention of delegates from the medical societies and colleges in the whole Union—to convene in the city of New York, on the first Tuesday in May, in the year 1846, for the purpose of adopting some concerted action on the subject set forth in the foregoing preamble.

This is an important movement, and one which we have long desired to see. We call to it the early attention of those who honor us by reading the pages of the Examiner, that they may reflect and be prepared to act upon the subject when the proper time arrives. On another page we have hinted at some of the benefits that accrue from such association, and we will now only add the expression of our conviction, that whatever it is desirable to accomplish by way of reform in the practice of medicine, must be achieved by the moral influence

of the members of the profession, and not by legislative enactments; and this moral influence can be rendered vastly more effective by comparison of sentiment and unity of action among those who feel an interest in the subject.

We copy the above from the Medical Examiner of July, and will only add, that if defects in medical schools are susceptible of rectification, the plan must be adopted by representatives from all the schools, in convention assembled; so that the contemplated reform, whatever it be, may be binding on, and carried out by the whole. A partial remedy is no remedy at all.

*Sulphur in the Bile.*—M. Pelouze, at the request of Leibig, has lately announced to the French Academy of Science the interesting discovery, made by M. Redtenbacher, of the the existence of Sulphur, in the proportion of 26 per cent. in the principle of the bile called Taurine; a fact which has hitherto escaped the attention of analysts.

SURGERY.—*Note on the results of abrasion of the Cornea, two years after the operation. By* M. MALGAIGNE.

It is now more than two years since I addressed to to the Academy of Science a first communication on an unusual operation, destined to afford to surgeons a last resort against opacities of the cornea which resist all other means. I had dissected up and removed nearly half of the thickness of the cornea; immediately after the operation, the patient saw objects; but objections arose on all sides against this new experiment. The cornea, thus rendered transparent, would soon resume its opacity; the attenuated cornea would become disturbed with staphyloma; the cornea, cut by the bistoury, would never recover its polish, and the luminous rays, refracted on the inequalities of its surface, would trace on the retina only a confused and obscure image; and, supposing transparency preserved, still clearness of vision would not be rendered to the patient.

The first results of the operation dissipated some of these objections; but time alone could decide as to the real value of the others. I present to day, to the Academy, a young girl who submitted to abrasion of the cornea on the 20th of March, 1843, twenty-five and a half months ago; I present her as a victorious response to all the objections that I have just enumerated, and as an example of a fact which I believe to be altogether novel in physiology, namely, the regeneration, at least ap-

parent, of the cornea. Permit me to recall in few words the principal traits of this case.

This young girl is at present, eighteen years old. From the age of one year she had been affected with disease of the eyes so intense that, from her sixth year, her sight was much obscured. New attacks succeeded each other up to the age of thirteen, and left upon the right eye an opaque spot which, during three years, made no progress towards a cure. In order to remove it, I described on the cornea a circular incision of about 6 millimetres* diameter, I dissected up the included portion so as to remove more than half the thickness of the cornea; the operation was performed publicly in the amphitheatre of the *hotel des Cliniques;* and the removed part was examined at leisure, felt between the fingers, spread on the table, so as to convince every one that it contained nothing but the altered tissue of the cornea. On the fiftieth day, the patient went out of the hospital, with the cornea almost entirely transparent, and being able to read small print with that eye. At that time an attentive examination shown a circular talus on the cornea; vestige, I believed ineffacable, of the incision and of the loss of substance which that membrane had suffered. Notwithstanding this talus, vision had obtained a perfect clearness. There was another interesting circumstance to be noticed; during the operation, the point of the instrument had penetrated into the anterior chamber of the eye and touched the iris, a very small pointed projection of the exterior part of the circumference of the pupil seemed to attest a slight adherence of the iris to the cornea.

However, after four months, on the 5th of September, the opacity had returned; the poor child, obliged, in order to live, to work at her trade of seamstress, had fatigued her eyes, and had lost all the benefits of the operation. Certain resolvent applications re-established the transparency, and she went out of the hospital again on the the 23d of October. There had then seven months elapsed since the operation; the circular talus and the prominence of the iris existed yet, and seemed to be permanent.

But this relapse of opacity was a serious matter. In order to avoid a second, I recommended to the young girl to take another mode of life which would enable her to save her eyes; but how much would it detract from the value of the operation, if it thus caused the loss of a

*Nearly a quarter of an inch.

laboriously acquired profession! At that price, it could be of little assistance to the laboring classes, and it would be applicable exclusively to the wealthy.

Happily, my patient obeyed my recommendation only in part.—When she retired from the hospital, she was obliged to aid her mother in the making of pantaloons; two months afterwards she went into service for the space of four months: after which, in May, 1844, she went to the country, to one of her aunts, at Corbigny, where she resumed her business of seamstress. This time the operated eye perfectly supported the fatigue; yet more, in January last she had a lively inflammation of that eye, which remained two months and a half, and notwithstanding, the cornea did not lose its transparency. Returned to Paris some time since, she has worked by the day with a mantua-maker, and works with the needle, from morning to night, without injury to her eye. Thus all fear on this score was dissipated, and the operation will not in any manner, impede patients in the subsequent exercise of their professions.

But the examination of the eye operated on, reveals some very curious particulars. In the first place, the projection of the iris has entirely disappeared, and it is necessary to admit that, by the effect of time and the motions of the iris, the adhesions to the cornea have been absorbed and destroyed; and then the talus, produced by the use of the bistoury, which yet remained at the end of seven months, has at present entirely disappeared; the cornea is as smoothe on one side as on the other, except a little cicatrix, which seems to be the result of an ulcer of the cornea, which complicated the last ophthalmia.

Is there real regeneratien of the cornea? or, on the contrary, has the talus been absorbed, so that, instead of acquiring thickness, the cornea has been attenuated at its circumference? The first opinion seems to me the most probable; it may be verified by experiments on living animals.

To conclude, the cornea has not again become opaque, it has not been distended into staphyloma; the sight is clear and permits the patient to work at the needle: and, to give a more exact idea of the result, notwithstanding a slight opaline tint on some spots on the cornea, the young girl, after the lapse of two years, reads small print without difficulty, as she had been able to do when she left the hospital.

(*Translated from Comptes Rendus*, 5 *Mai*, 1845.

*Albuminuria.*—The presence of albumen in the urine is generally received as an undoubted evidence of disorder or disease of the kidneys. It is believed to be more particularly diagnostic of *Bright's disease* of that organ. The tests for the presence of albumen in the urine are *heat, nitric acid,* a solution of *corrosive sublimate, &c.*, which precipitate the albumen in the insoluble form.

It must however, be recollected, that albumen is very frequently present in this fluid when the kidneys are not in an abnormal state. It is generally in too small a quantity to be precipitated by nitric acid, or by the application of heat, but readily to be recognised by the light colored precipitate produced by the addition of the solution of corrosive sublimate to the urine. This latter test is, therefore, *too delicate* when our object is to ascertain the fact of derangement of the kidneys.

Moreover, C. G. Lehman asserts, in his *Lehrbuch der Physiologischen Chemie, B.* 1. *S.* 184, that albumen is found in all *colliquative* discharges; "that from the bowels always contains a superabundance of congulable matter; in cholera there is secretion of albuminous matter throughout the whole alimentary canal. In the last stage of most chronic diseases, the urine is albuminous; in the urine of a consumptive I found, six days before his death, 3,216 per cent. of albumen; in that of a patient, the subject of cancer of the womb, who died within thirteen days, 2,931 per cent. According to my observation, it is a constant symptom of hectic fever. Even in colliquatic sweats, I have sometimes found albumen."

Lehman's mode of ascertaining the *quantity* of albumen in the urine is quite simple. He mixes the fluid with nitric acid and causes it to boil. The albumen and mucus are precipitated together. The precipitate is treated with acetic acid, which dissolves the albumen and but very little muscilage; the albumen is then precipitated from this solution by carbonate of ammonia, and dried to determine its weight.

*Arsenic distinguished from Antimony, in the test of Marsh.*—We have seen, in the *Rapport,* 1842, p. 100, that M. Bichoff has proposed the use of Labarraque s liquid to distinguish between antimony and arsenic; arsenic dissolves in it completely, while antimony remains insoluble. M. Esenwein has confirmed the exactitude of this method by new experiments, and esteems it the most rigorous of all others. M. Chevallier has also verified the advantages of this process.—*Berzelius, Rapport annuel, &c.*, 4-me annee, p. 139.

*Lehman's Experiments on the Urine.*—This Chemist and Physiologist has lately undertaken a very interesting research. He submitted himself during several weeks to a peculiar regimen; he commenced by consuming nothing but *animal* food, and drinking only water, and examining minutely the urine during that period; afterwards he exclusively adopted *vegetable* aliments, without having his health at all affected by these two different regimens; finally, he took only *non-nitrogenous* food, that is to say, the daily nourishment was composed of 400 grammes of a mixture of sugar, starch and gum, and of 125 grammes of oil of almonds. This latter regimen was a complete diet, so that, although this food contained 53 grammes of carbon more than the preceding, it was not sufficient to support life more than three days, without causing a notable *malaise* and a continual sensation of hunger. The urine was of a reddish brown color, slightly acid, and acquiring a marked alkaline reaction at the end of thirty-six hours, at the temperature of 57° to 65° F. These are the results of the analysis of the urine passed during each of these three regimens.

| | *Regimens:* | | |
|---|---|---|---|
| | *Animal.* | *Vegetable.* | *Non-nit.'s.* |
| Water, | 90,932 | 93,492 | 96,511 |
| Urea, | 5,379 | 2,569 | 1,108 |
| Uric Acid, | 0,141 | 0,098 | 0,054 |
| Free Lactic Acid, | 0,228 | 0,133 | 0,511 |
| Lactate | 0,167 | 0,206 | |
| Watery extract, | 0,082 | 0,334 | 0,276 |
| Alcoholic extract, | 0,450 | 1,577 | 0,878 |
| Muscilage, | 0,009 | 0,010 | 0,011 |
| Com. salt and Sal Ammon., | 0,537 | 0,371 | 0,114 |
| Sulphates, | 1,151 | 0,723 | 0,298 |
| Alkaline Phosphates, | 0,552 | 0,374 | 0,248 |
| Earthy do. | 0,372 | 0,111 | 0,091 |

The quality of solid matters, in grammes, rendered daily, according to the regimen, was as follows:

| | *Residuum of the Urine.* | *Urea.* | *Uric Acid.* | *Lactic Acid and Lactates.* | *Extractive matters.* |
|---|---|---|---|---|---|
| Mixed food, | 67,82 | 32,498 | 1,183 | 2,725 | 10,489 |
| Animal food, | 87,44 | 53,198 | 1,478 | 2,167 | 5,196 |
| Vegetable food, | 59,24 | 22,481 | 1,021 | 2,669 | 16,499 |
| Non-Nitro. food, | 41,68 | 15,408 | 0,735 | 5,276 | 11,854 |

*Ibid, page 369.*

EDITORIAL REMARKS.—Several practical inferences of value might be drawn from these definite observations. The increase of the relative and positive qualities of the urea, the sulphates, the phosphates, and the other salts, with the exception of the lactates, during the exclusive use of animal food; their great diminution during that of the vegetable diet, and still greater, when food containing no nitrogen is exclusively taken, with the stimulaneous increase of lactic acid and the lactates in the inverse order, cannot fail to strike the reader.

The fact that non-nitrogenous food, of the description used, is not capable of allaying hunger, nor of sustaining life, for any length of time, is not sufficiently borne in mind, or not sufficiently appreciated by practitioners and the public in general. Pure starch, such as the finer kinds of arrow root, tapioca and sago, which are nothing else, pure sugar and pure oil or, other fatty matters, do not contain all the elements of nutrition necessary to the support and renewal of the living tissues of the animal body. Animals fed *exclusively* upon them speedily die of inanition, and the more pure these principles are, the worse it is for the subject of the experiment. These, and similar substances, although they are not sufficient of *themselves* to support life, are yet very important, or if you please, very nutritious articles of food when taken *in mixture* with other articles containing nitrogen; for while they cannot furnish the elements for the regeneration of muscle, of tendon, or of brain, they may still help to sustain the respiratory process or aid in the formation of fat.

Arrow root is generally considered one of the mildest, most nutritious, and easy of digestion, among dietetic articles; it is hence frequently given to young children, as a substitute for the milk of the mother, or to allay irritation of the bowels. Boiled with *milk* and water, and properly sweetened with sugar, it would not be very objectionable; but when, as is sometimes done, it is boiled simply in water, and sweetened with pure sugar, it is a strictly *non-nitrogenous* food, and is not capable of supporting life. A strong and healthy child *would soon die of starvation* were it to be confined exclusively to such *a diet.*

*Animals which support a high temperature.*—M. Spallanzani has observed, as is well known, that certain little animals, belonging to the family Entomozoa, which he calls *rotifere* and tardigrades, be-

come completely dried up during a dry time, and the form and all the signs of life disappear, to reappear anew when they are again moistened with water. M. Doyer* has lately confirmed the observation of the Abbe Spallanzani. The animal, in the soft state, dies at the temperature of 122° Fah., but if it be previously dried completely, it will afterwards support a temperature of 251° Fah. without losing the property of returning to life when it is moistened with water. Even when we heat a number of these animals up to 284° Fah., many among them will revive when they are placed in contact with water. The explanation of this phenomenon is simply, that the albumen contained in the fluids of these animals, when in the soft state, is coagulated by the heat; and when they have been perfectly dried, they may be exposed to a very elevated temperature without causing the albumen to pass in the coagulated condition.—*Translated from Berzelius' Rapport annuel, 4-me annee, p.* 393.

## TYPHOID FEVER.

The following letter was presented (by request) to the Secretary of the Medical Convention of Ohio, at its session in Columbus, in May last. We invite attention to it, as well as to the comments upon it:

FELICITY, June 10th, 1845.

*Dear Sir*:—In accordance with a resolution of the State Medical Convention of Ohio, adopted May 25th, 1845, requesting me to furnish the secretary with a synopsis of the symptoms and treatment of typhoid fever, as it has fallen under my observation in the Southern part of the State, I herewith transmit to you the following general characteristics of thirty cases promiscuously selected, of which notes were taken and which occurred in the fall and winter of 1844.

The symptoms in the more insiduous cases were lassitude, mental and physical—occasional transient pains in the extremities, especially in the inferior—weakness in the back, giddiness in the head, and ringing in the ears. These indications were so slight as to attract but little attention for from one to two weeks: when the debility and stupor would very perceptibly increase, accompanied with hardness of hearing—diarrhœa, pains in the bowels—rigidity of the abdominal muscles—some tenderness, upon pressure in the epigastic region, but more frequently, it was accompanied with a gurgling noise in the region of the cœcum. At this stage, a red spot was observable, commencing on one or both cheeks, sometimes upon the chin or ear, and frequently changing from one location to another, and sometimes extending over

*L'Institut. No. 451, p. 289.

the whole face and even down upon the chest. In some cases at this stage, patients expressed themselves entirely free from pain, and continued so to the termination of the disease. They appeared to crave nothing but sleep. The tongue was generally moist and slowly and tremulously protruded and slightly coated, but if the diarrhœa was not checked it would soon become dry in the centre with moist edges, or smooth, dry and red all over. Hæmorrhage from the bowels was occasional and severe; but from the nose it was slight and of more frequent occurrence in the latter stages. The appearance of the urine in many cases varied but little from health, in others it was so highly colored, as evidently to contain a portion of the coloring matter of the blood. In most cases, there was delirium of a low kind, with no disposition to pay attention to any thing. The skin, in the earlier stages, was universally hot and dry. The more violent attacks presaged by alternate chills and flushes of heat—a heavy throbbing pain in the head—pain and a sensation of fatigue in the back and legs. In [illegible]e cases great prostration and a strong determination to the head [illegible]n early symptom. From this stage until a blister was drawn on the back of the neck, or convalescence fairly established by other means, nearly all that passed was forgotten by the patient. Subsultus tendinum was a frequent symptom. Permanent contractions or rigidity of the muscles of the arm occurred in only one case, and then the patient recovered. Several who had a vague and indistinct recollection of what passed during their mental aberration, say that they imagined that one side or half of their person was entirely lost: others that one side appeared detached or in peculiar difficulty as if bandaged or bound with a cord. The eyes were languid, and the expression of the countenance dull and listless. Abdominal tympanitis occurred whenever the diarrhœa was not checked in the early stage of the disease.

The lenticular rose-colored spot or typhoid eruption, was in some cases profuse, and in others sparcely distributed. Sudaminia was observed in several, but limited to the region of the axillæ. The pulse varied from 75 to 130 beats in a minute. Respiration was slightly accelerated, and a very slight cough was a common though not a constant symptom. The thirst was not generally very great. As to the sequel, there was nothing particular in a majority of cases. Two appeared to terminate in erysipelas of the head and face, two in suppuration of the axillary, and one of the parotid glands. With but few exceptions, the age of those affected was under thirty-five years, and varying from that to infancy. I had no evidence of its contagiousness except in one family of several members. They were all down at once, and their nurses from other families were taken with the same fever, and were removed to their several homes, but it spread no farther from them. The disease commenced in July, about ten miles from the Ohio river, and gradually advanced towards it. It prevailed most in August and September. Nine-tenths of the cases were confined to occupants of frame and log houses. A small majority of those affected were females. The time they were under medical treatment varied

from two to three days—average fourteen days. As to the cause or causes of the disease, I have not been able to arrive at any satisfactory conclusion. It continued through the winter, and was less complicated with bilious symptoms in cold than warm weather.

Having given some of the most prominent symptoms of this epidemic, without going into a detail of all the minutiæ, yet sufficient I think to characterise the disease, it remains for me to notice the course of treatment which gave the most satisfactory results, and that, in proportion as it was rigidly enforced. The only course adopted that seemed to break up the train of symptoms, or cut short the attacks, consisted in persevering applications of cold water to the head, sponging the spine with salt and water during the paroxysm of fever, and laying large sinapisms over the bowels, alternated with bread and milk or hop poultices, or fomentations. At the same time, calomel was given in doses of from six to ten grains, with capsicum, Dover's powder, or both, every six hours, and active purging guarded against with tinct. opii, till copious viscid evacuations were procured. When these were worked off, if the delirium still continued, a thorough blister was drawn on the back of the neck, which universally produced a restoration of the mental faculties. Immediately following this, if the tympanitis had subsided, which was generally the case under the operation of the calomel and sinapism, I gave from four to six grains of quinine, with from 1.8 to 1.4 gr. of acet. mor., in doses from two to four hours apart. From one to four of these doses generally rendered the tongue and mouth more moist, the pulse more full, slow and soft. The red spots on the cheeks subsided, the breathing became slower, and a general moisture of the skin was accompanied by sweet sleep. These effects of the quinine, were only produced in their full form when its administration had been preceded by viscid bilious evacuations. The convalescent treatment consisted in small doses of quinine in solution, through the day, and hyd. cum creta and pulvis doveri at night.

Two cases only that fell under my observation proved fatal; and one of them was a relapse. Neither, however, were treated upon the above plan. I have no recollection, either from memory or my notes, of ptyalism occuring under this mode of treatment.

J. C. KENNEDY.

We apprehend that the disease usually called Typhoid fever is here pretty faithfully described. The difficulty of proving whether or no the intestinal lesion, so much talked of by some, is actually a part or feature of this disease, was insurmountable. The Doctor cured nearly every patient that fell under his notice. It is pretty plain that the disease was not contagious, and that it did not run on to the fiftieth or sixtieth day, as some think it must, by a law of necessity.

It is abundantly clear to my mind, that the *"thorough blister to the neck"* induced such a concentration of morbid action, as not only to

restore reason, but to establish such an interval, either of remission or intermission, as warranted the use of the sulphate of quinine, with a pretty liberal hand. If this course had not been pursued, and the expectant plan had been relied upon, the same patients, if cured at all, would have been under treatment five or six weeks, as is often the case in other regions. We have more than once insisted on the use of large blisters on the stomach, as preliminary to the use of sulphate of quinine, and we care not how the system be put in readiness for that remedy, whether by the *syncopal* remission in the first or second day of of yellow fever, as induced by bleeding, or by the right use of large blisters, or by cathartics or emetics, if these be admissible in other forms of fever.

*Cause of Diabetes, by* L. MIALHE, (*Ann. de [illegible]. et de Phys. Sept.*, 1844.)—It is known that in a healthy state animals may feed on sugar, gum, &c., without any appearance whatsoever of these substances in the urine or other secretions; but in the disease, called diabetes, this kind of food appears to undergo little or no change, and the urine is found to contain more or less sugar, or a substance resembling gum. The result of the present experiment, has been to show that hydrocarbonaceous food, such as grape sugar, gum, starch, &c., does not undergo assimilation until the alkalies of the blood have transformed them into a peculiar substance, the nature of which has not yet been examined; if however this transformation does not take place, they undergo no change, and are excreted by the kidneys. The reason why saccharine and farinaceous matter does not undergo the requisite change in the diabetic patient is explained as follows: individuals suffering under diabetes do not perspire, or, but very slightly; as the secretions of the skin are acid, it follows that when they are suppressed, the pressure in the blood of free alkalies or their carbonates becomes impossible, being neutralized by the acids not excreted; consequently the saccharine matter used as food cannot undergo the *change necessary* prior to its assimilation, and the kidneys endeavor to disembarrass the blood of what is now foreign and noxious. This fact suggests, as the curative means for diabetes, diaphoretics and alkaline preparations.—*Silliman's Journal, July*, 1845, *p.* 202.

*Gallic acid in Hæmaturia.*—Dr. Bird, in his late work on *Urinary Deposits, &c.*, remarks: No remedy has appeared to me to be

of such extraordinary value in the treatment of hæmaturia as gallic acid. I have seen this drug arrest for weeks, bleeding from an enlarged (and fungoid?) kidney, after all other remedies had failed. It should be given in doses of five grains in a draught, with muscilage, and a little tinct. hyoscyami, and repeated at short intervals. This drug really acts as a direct astringent, reaching the capillaries of the kidney, and finding its way into the urine, which soon becomes so impregnated with it, as to be changed into ink on the addition of a few drops of tincture ferri sesqui-chloridum.—Page 234.

*Pettenkoffer's Test for Bile.*—Add to the fluid supposed to contain bile, concentrated sulphuric acid until it becomes hot, and then drop into it a solution of sugar; the pressure of the bile is manifested by the mixture becoming of a deep pink or red color, varying in intensity.—*Lancet, October*, 1844.

THE STUDY OF MEDICINE AS IT WAS.—Thirty-five years ago, the study of medicine was not precisely what it is now, in many respects. The public teaching, by Professors, was decidedly inferior to the tuition of the present times. We possess, means and facilites which were not in use in olden times, and of course, the labors of the pupils are now much more pleasant than formerly. Our diagrams, models, cabinets, all are an improvement on the schools of forty years ago.

In view of these advances in Collegiate instruction, it may well be inquired, why is the profession constantly deteriorating? Can a good and sufficient reason be assigned for the delinquency?

We will not presume to answer these queries fully, at present, but will merely throw out a few reflections, in the way of contrast.

In the olden time referred to, the act of becoming an office pupil was somewhat a grave affair. The physicians in Philadelphia, New York, &c., who took private pupils, formerly required a fee. This varied from *one hundred dollars*, per annum, to *one hundred pounds*, for the whole term of study; and the fee was usually paid in advance. Let it be borne in mind, that the payment of the sums named, was in the nature of a *quid pro quo*. The preceptor made it a rule, to direct the studies of his pupils, even to the book and page, and met them *three times* or oftener, per week, to ascertain their degree of improve-

ment. The putting up of prescriptions, the attending of sundry patients, and other duties of a kindred nature, were regularly assigned, and it was not difficult for the preceptor to know whether his pupils advanced, stood still, or retrograded.

At the period spoken of, no one thought of entering an office, who had not enjoyed the advantages of a good English education, with some knowledge of the Latin language. A physician of standing would have felt himself dishonored, by having in his office, a pupil who could not write correctly, a single line of common English. Hence it has turned out, that a very large proportion of the graduates of those times, became contributors to the public journals, with credit to themselves and profit to the profession.

Does such a state of things exist now in reference to office pupils? Or on the contrary, do we not find it to be the fact, in many places, that the getting of pupils, is one of the electioneering devices to procure business? It is notorious that young men, wholly disqualified for the profession of medicine, are coaxed into offices, simply to swell the number of pupils, as a means of persuading the lookers on to employ the preceptor. The young men so made use of, seldom pay a dollar in the way of a tuition fee; and they naturally judge of the commodity by the value put upon it by their *instructor*. Can it excite surprise, that such men, in actual practice, will exhibit a low estimate of professional dignity?

We have spoken of the physicians who take pupils in this way, as *instructors;* but alas! it is too true, that the instruction is frequently only *nominal;* and indeed, as no compensation is given, it would seem unreasonable, to expect more.

We have seen that the Collegiate teaching has vastly improved, every where, and consequently, that it is not in fault. Where then is the defect.

*West Feliciana Medical Society:*—We have received a copy of the "Rules and Regulations of the West Feliciana Medical Society, adopted at a special meeting, held at the Court House in St. Francisville, on the 14th of June, 1845," &c., and we wish the society longer life than has been the lot of many others of the same kind. In union there is strength, is an old trueism. The association cannot fail to be productive of some good to the members, if not to the pro-

fession at large. The establishment of a proper code of Medical Etiquette regulating professional intercourse, cannot fail to be advantageous to all concerned.

We perceive that one of the objects of the society, is the perusal of essays and the reading of lectures, at their stated meetings. It is to be hoped that the members will be stimulated to exert themselves in this kind of composition, and that many interesting facts and observations will be elicited. We cordially offer the columns of the Lancet for the publication of their selected essays which are of a practical nature.

*To Correspondents and Subscribers.*—Dr. Doniphan's paper on the Remitting Bilious Fever of Louisiana, has come to hand.

We have also received some communications from Dr. E. L. Dudley, and another letter from the Editor. They will appear in our next number.

In despite of the determination of the pro. temp. Editors, to shun delay in the issue of the Lancet, it has come upon us. Our copy has always been greatly in advance of the printer, and we had hoped that our passion for punctuality, would not be marred by any embarrassment in the mechanical department. Finding it impossible to get along comfortably, the contract of the Printer has been transferred to another press, solely to insure a prompt, and creditable issue of the work. We know how subscribers feel when their numbers are out of season, and we are determined to avoid this difficulty, in future, if possible. We ask therefore, a little more forbearance; and hope to find the Lancet sent out, (after we get over the unavoidable delay caused by the change just effected,) with as much regularity in the first week of each month, as is realised by any other journal in the country.

We remind our patrons, that remittances can be made through Postmasters, under the new regulation of the General Post Office, free of postage; and we say again, that we take no letters from the office, on which the postage is not paid, unless they are known to contain money.

# THE WESTERN LANCET.

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## PATHOLOGY AND PRACTICAL MEDICINE.

### *Remarks on the Topography of Michigan, and the diseases incident to its Climate. By* Dr. G. Sprague, *of Plymouth, Michigan.*

In writing the above caption, there are two things which present themselves as sources of regret in the mind of the writer. They are these: That medical practitioners in this State have been so negligent of communicating through the proper medium, information of this kind, and our own inability to do the subject justice.

A full history of the diseases to which this State has been subject from its first settlement, could only be got up in the proper manner, by the combined efforts of such physicians as have practiced in certain localities, from its first settlement to the present time. The difference that would exist between a detail of facts brought together in the manner here referred to, and those contained in this brief article would be this: that, in the one case, we would have placed before us all the changes that have occurred in the character and intensity of disease, by the incidental changes of soil and season, since the red man was first driven from the trail of his fathers, and, in the other, observations only that have been made within the brief period of three years.

In the following brief remarks, we shall speak especially of the topography and diseases of the locality in which we have practiced for the above period, with such remarks upon the State at large, as can be made from the nature of our information.

The locality above referred to, is the north western part of Wayne county, being the county in which Detroit is situated. The corner township (Plymouth) is thickly settled, contains four villages, the largest of which numbers about five hundred inhabitants. The others number from two to four hundred. The north half of this township, is heavy timbered and hilly. The south half is level, part of which is heavy timbered and a part plains or openings. The portion of the town that is timbered is good soil. The soil in the openings is sandy and poor.

The town is watered by two small streams, branches of the Rouge, which empties into the Detroit river, below Detroit.

Upon the principal of these branches, and within the borders of the town, there are seven flouring mills, which support twenty run of stone. To each mill is affixed a dam, two of which flow water over a large surface. There is in these ponds a large amount of loose timber, stumps, dead standing trees, and aquatic plants.

The township on our east is level throughout, mostly openings with sandy soil. On our south the country is level, with heavy timber, soil rich. On our west, (which takes us into Washtenaw county,) we have good soil, partly timbered and part openings. On our north, (Oakland county,) we have a more uneven surface, soil good with heavy timber. The county of Wayne is generally quite level, having considerable low wet ground.

The first of our residence and practice in this State was the winter of 1842–3. During this winter, we had more snow than usual for this State. Winter set in by snow about the first of December, from which time we had good sleighing until April. This winter was marked by the usual amount of inflammatory cases for this climate. The spring and early part of the summer following was healthy, the nights were cool. Owing to the amount of snow on the ground at the commencement of spring, the coming forward of the fruit trees was delayed, the result was, they escaped our usual late frosts, and fruit of all kinds was plenty. There was but a small amount of rain this spring and summer. The latter part of August and September it was very dry. The few cases of disease which occurred during this summer up to about the 25th of August, were mild attacks of a various character. But from this date up to the close of September, the inhabi-

tants of certain localities had experimental proof of the influence of heat and moisture, combined with decaying vegetation upon the health.

We well know that there are many, even at the present day, who contend for the non-influence of locations of the kind which we are about to describe, upon the public health; or, in other words, that *miasm*, if you please, does not produce periodical fevers. It is enough to admit that there are in medicine, theoretical points, upon which there will probably always exist a difference in the minds of different members of the medical profession, without admitting that there is any justice in the difference which exists upon this point. It is a lamentable fact, that too many theories are produced from the innate ability of some minds to produce them; or, in other words, that such is the rage for advancing new opinions upon points entirely unprofitable, and upon which satisfactory conclusions cannot be arrived at, that many medical men make it appear by their actions, that they feel warranted, and safe, in showing hostility to any theory, however well it may be supported by observation and experience. We have an illustration of this in the sneer with which some treat the subject of Auscultation and Percussion.

Now, we contend, upon grounds that are also the subject of blind satire, that there are many, who are in other respects fully competent to decide upon scientific subjects, who are, and always will be, deficient in the ability to detect and discriminate between sounds.

Upon the same grounds, we also contend, that there are many who cannot perceive the relation between cause and effect. That this dependance is invariable, and always in action, is as clear to many minds, as the plainest view which they espouse is to theirs, cannot be profitably questioned. In this manner then, is the conclusion formed in our mind, that miasmatic influence may operate under the observation of men of otherwise superior minds, but who have not the kind of talent (hence not the desire) to see or investigate a point of this kind.

Another illustration of what is here contended for, is the clearness in the minds of some of our authorities upon the causes of disease, and in others by the obscurity which is thrown over this branch of their subject, by the mere passing remark, that with

regard to the causes, they are not understood, or at most are very obscure.

Now, that they are obscure to their minds, and further, that this is a point upon which they take no interest, is no matter of marvel. Neither is it a matter of surprise, that an individual, having no love for melody, nor the requisite talent for distinguishing the difference between tunes in music, should conclude that the science of Auscultation and Percussion is all bubbles and humbuggery.

But to bear more directly upon our subject. The location which we have particularly in our mind, and of which we shall give a short description, is in the vicinity of one of the ponds before referred to. This pond is located in a valley which is formed by the rising of two banks to the heighth of some fifty or sixty feet. The space between these banks is of a triangular shape, the widest point is some forty or fifty rods. The principle part of this space is occupied by the pond, which flows back, (forming the point of the triangle,) some two hundred rods. In this pond is situated a great amount of loose timber, stumps and dead trees, all in a state of decay; besides there is yearly produced a large amount of vegetation, which floats upon the surface of the water, and there undergoes its annual decay.

On the west side of this pond there is a plain at the foot of the west bank, containing some two acres. The surface of this plain lays some ten or twelve feet above the surface of the water. On the top of this west bank there is another plain of upland which is densely timbered. It will now be perceived, that on the west side of this pond, we have a dense breastwork, rising to the heighth of about one hundred and forty feet. The result of course is, that the west winds (which are almost our constant winds) are prevented from keeping up any circulation of air in this valley. The result of this peculiar combination of influences is brought to bear upon a number of families, who occupy the plain between the pond and the west bank. There are seven of these families. Their business is milling and coopering.—About the 25th of August, 1843, the date before referred to, I was first called into this settlement to treat a case of common intermitting fever. This was easily subdued in two or three days by the common course of treatment. Following this case, others

appeared in succession, each assuming a severer form than those preceding, so that for the most of the time, during four or five weeks, I had from eight to twelve patients in these families. The first cases, which were of the remitting form, were mild, and easily subdued in about three days; or, in other words, the recurrence of fever was generally prevented after the second or third exacerbation. As the season advanced, these cases gradually assumed a more severe and obstinate form, being attended with a slighter remission, a brown dry tongue, and in some few cases muttering delirium. The treatment made use of in the mildest of these cases, was first to give an emetic at the coming on of the fever, which would generally operate as cathartic also; when this did not follow, a mild cathartic was administered. The fever was then kept down by nausea and cold water, both internal and external. During the remission, the sulphate of quinine was administered in three grain doses every two hours, and when the fever again rose it was met by the cold water and nausea. The bowels were kept mildly open. The most of the cases that occurred towards the close of the season, were treated by first giving about twelve grains of calomel, followed by salts or oil. The fever was then kept down by the same means made use of in the preceding cases, to-wit: nausea, cold drinks, and cold sponging, together with cold showering upon the head. During the remission, the sulphate was administered in four or five grain doses every two hours, and in some cases every hour. Local congestions and inflammations were met by blistering, and other means to equalize the circulation. These cases could generally be subdued in from six to eight days. They all recovered.

These cases closed by the setting in of cold weather, with rain. The health in these families was good during the winter, and also during the following summer up to a time which we shall notice. During the time that has been referred to, the health through the country generally was good. There were, however, a few cases of intermitting and remitting fever, in the neighborhood of the other mill ponds that were more favorably located with regard to the free access of air to and over them.

During the winter of 1843–4, there was nothing occurred of special interest in the diseases of this period. This winter we had but little snow, the weather was generally mild for this cli-

mate, with considerable rain. During the spring of 1844, we had more than the usual amount of rain. This continued up to about the middle of July. Following this, we had some weeks of dry hot weather. The diseases of June and July were such as never had before occurred in this locality. Those afflicted were mostly children. The first case of interest was a child, a girl of the age of seven years. I was called to see this case about the first June. I learned from the parents that the child had been failing since in March. She had irregular appetite, sometimes voracious, at other times no inclination to take food; had spells of appearing cheerful, and had enjoyed her usual gambols with her playmates. At other times would appear inactive and disposed to retire from their society. This was accompanied by a wasting of the soft parts, the muscles were soft and flabby, and the skin was of a sallow paleness. There were irregular spells of fever, at which time the pulse would be but little accelerated in force or frequency. Upon examination, could detect no tenderness in the abdomen, nor any abnormal sounds in the respiration. I was led to infer the presence of worms in the intestinal canal. I felt confirmed in this view by learning from the mother that she was in the habit of using but very little salt in their food, the family preferring food containing but very little if any salt. Having given credence to the theory that worms are generally produced by a deficiency of Hydrochloric acid in the gastric juice, and that this was the result of the absence of common salt in the circulating fluid, I was confirmed, as before remarked, in my diagnosis. I treated the case by giving spigelia followed by cathartic. The first evacuation contained an Ascaris lumbricoides, measuring about ten inches in length. No further evidence of worms was got by the evacuations, notwithstanding we persevered in the treatment for their expulsion by calomel, cowhage and cathartics. The remedies of the last class were used of a mild character owing to the debility of the patient. During this time there was steady wasting of the body with irregular spells of slight fever. Toward the close of the case there was some tormina and tenesmus with small mucus discharges, also slight congestion of the brain. The head was kept cool by cold applications, blisters were applied to the extremities, and the hydr. cum creta, was administered in small doses combined with ipecac.

The case gradually got worse. A greater tendency to congestion of the head, which being kept down by cold applications, caused the lungs to receive the superabundant amount of fluid which circulated to the upper part of the body, and under a rapid breathing without any cough or venous color of the lips, the patient died.

Autopsy, ten hours after death; had not time to examine the head. The entire body of the lungs, excepting a small part of the inferior lobes, were entirely filled with effused blood. Heart healthy, except some little congestion of its larger vessels.—Stomach presented a healthy appearance. The glands of Peyer were enlarged and somewhat inflamed; there was also inflammation and thickening in the colon to the extent of about four inches in its descending portion. There was not the least perceptible tenderness in any part of the abdomen until two days before death; this tenderness was in the region of the inflamed colon, over which a blister was immediately applied. No appearance of worms in the intestines.

During the progress of this case, another came under our care of the following kind. A boy, six years of age, was attacked with frequent mucus discharges, accompanied with severe tormina and tenesmus. In other respects felt well. Our diagnoses was of course mucus inflammation in the colon, or dysentery. We prescribed the hydr. cum creta, in combination with ipecac, opium and acetate of lead, together with mucilaginous drinks and injections of starch and gum arabic. Under this course the bowels improved. Upon the abatement of the discharges, congestion of the brain set in; blisters were applied to the extremities, the head showered with cold water, and the lungs in this case received the shock. Death soon closed the scene. Autopsy six hours after death. Objection being made to examining the head, this was passed over. The lungs were in the same condition as in the preceding case. The abdominal vicera were healthy with the exception of the last twenty inches of the intestinal tract. This was inflamed and thickened, being about four times its healthy thickness. The child had been a little unwell for some days before the attack.

From this on, cases occurred in rapid succession, putting on the form of dysentery, being accompanied by mucus and bloody dis-

charges; the discharges occurring in many cases every fifteen or twenty minutes, with severe pain before and after the discharge. They were treated with the hydr. cum creta, in frequent cases combined with astringents, opium and ipecac. Also blistering over the descending portion of the colon, gum arabic in solution for drink, and injections of starch and a small quantity of acetate of lead combined with it.

By this means, the most that could be effected upon the bowels was barely to keep the discharges a little in check. The remedies before spoken of were given in large doses. In most of the cases where the bowels were benefitted, congestion of the brain set in. This would generally terminate by a repetition of convulsions, which would finally close the scene. In other cases there would be a constant stupor, with contraction or dilatation of the pupil, a breaking down of the sclerotica, after which death was the inevitable result. For a period of about five weeks, I had from ten to twenty cases of this kind under my care continually; all the patients were children from one to seven years of age. These cases occurred mostly in two of the villages before spoken of, which are about three-fourths of a mile apart. There were very few cases of the kind here described that occurred in the practice of any other physician in this locality.

I was called in council in a case where the child had had a very slight dysentery, which terminated in disease of the brain of a chronic character. When called to this case, the patient had been sick some five weeks; at this time there was present a small quick pulse, muttering delirium, emaciation, and ulceration of the eyes and nose. The humors of the eyes were afterward discharged. The case of course proved fatal. I had not time after the second post mortem examination before spoken of, to make any further examinations of this kind.

The cases occurred in a healthy location, and all within a circle of three miles. There was no cause known to be in operation different from what had always existed in this region, that could be expected to produce attacks of this kind. These cases were away from the mill ponds, with the exception of one which occurred in the vicinity of the mill pond before described. This was a child about two years old. The attack came on during the existence of the disease in other parts, and terminated fatally

in five weeks without any affection of the head, the only case which did terminate in this way without a supervention of this kind. This child took for days, powders every two hours, composed of opium grs. ss., hydr. cum creta, gr. 3, ipecac and acetate of lead aa. gr. 1, with no other effect than partially to check the evacuations. There was also used by injection, starch and infusion of galls.

One of the first cases which I met with, was in a child sixteen months old, whose parents had arrived but two days before the attack, from the State of New York. This child was healthy up to the time of the attack. I treated this case without opium, depending upon the hydr. cum creta, astringents and ipecac, together with injections of starch and solution of gum arabic.—These agents had no influence upon the evacuations. The case terminated fatally by congestion of the brain, in about five days after the attack.

The only cases that I heard of other than these, of a similar kind, occurred at Ypsilanti, a village distant from here fourteen miles. The cases which occurred at that place, generally terminated by congestion of the brain. They were as generally fatal as those occurring in my practice, as high as six children being buried daily in that village. About the middle of July closed all attacks of this character. It might be well here to remark that our fruit was cut off by late frosts, consequently these cases cannot be accounted for on the score of eating green fruit. Following the close of these cases, we had one month of good health, which takes us into the middle of August. About this time the mill ponds began to come in for their share of the spoil. It will be remembered that the first half of this season (to-wit. up to August 15th,) was wet, from this on it was quite dry and hot, the mercury generally standing at from 85° to 93° Fahr., in the shade at 2 o'clock, P. M., and it is not common to have many successive hot days in this climate, and our nights are generally quite cool.

As before stated, the last half of August, witnessed the commencement of attacks attributable to miasmatic influences.—These cases were almost entirely confined to the vicinity of the stream upon which the ponds before referred to are located. And, as was the case the year previous, the settlement before describ-

ed in the vicinity of one these ponds, suffered far more than three times the same number of inhabitants did in any other location. The cases occurring in these families, as was the case the previous season, commenced rather mildly, gradually assuming the severer forms until again closed up by cool weather and rains. The treatment made use of was similar, in most cases, to that persued the previous fall, viz. cleansing the alimentary canal by emetics and cathartics, sponging the body with cold water, and quinine in doses of from three to five grains. As was anticipated, from the amount of rain in the first part of the season, and the drought in the after part, attacks of an intermitting and remitting form were more severe than the year previous. The intermittents approached nearer to remittents, and many cases of remittent fever put on the form of continued toward the close. The tendency that existed to congestion of the brain in the spring, also continued through the fall. Many cases in the families who reside in the vicinity of the pond which we have particularly described, put on this form, whereas the fall previous there was nothing of this kind occurred. One case in particular, a boy aged twelve years, was attacked with congestion of this organ, and died in about forty hours. I did not succeed in making any impression upon his symptoms. He took a large amount of antimony without producing nausea; also the loss of twenty ounces of blood made no impression upon the pulse. Blisters were applied to his extremities, of which he took no notice. There was no convulsions in this case, neither was the pupil unnatural in size, though the eyes presented a very inexpressive appearance.

The measles made their appearance to a limited extent during this season, and almost invariably terminated in congestion or chronic inflammation of the deep seated parts of the brain, proving fatal in the majority of cases.

The winter of 1844–5 was rather healthy in the locations last described, but in the north part of the township the measles made their appearance late in the fall to a limited extent, leaving those who recovered, in a feeble condition from which some never recovered. Those cases that proved fatal, terminated by some disorder of the encephalon. An intelligent lady remarked to me about the middle of the winter, that the son of a friend of hers, aged about ten years, acted curiously ever since he had the mea-

sles, which had been about two months. On my asking how the boy acted, she replied that he was at times very silly, at others very peevish, that he slept but little at night; that his mother could not make him eat, he however attended school and committed his lessons as usual. She enquired what I thought of his case. I replied that he probably would not live a great while, and that he would die from disease of the brain. In about a month after this, the boy was taken down with irregular chills, and spells of fever. His physician treated him for ague, with Dover's powder, quinine, &c. The boy continued to get worse, and on the supposition that two heads are better than one, if one is a sheep's head, council was called. The Dover's powder and quinine was continued with the addition of calomel, and toward the close of the case, it was suspected that "perhaps the boy might have some disease of the brain." The case terminated fatally of course.

The spring and summer of the present year, (1845,) has been remarkably dry and healthy. There having been but very little rain up to the first of September. We had more successive hot days than usual, although our nights have been cool, with very few cxceptions. There have been very few cases of intermittent or remittent fever this fall. In the locality before dwelt upon, there has been but one case each, of intermittent and remittent fever,—these were easily managed. The cases occurring through the country generally, have been mild, with few exceptions, in these cases there was congestion of the brain. I have yet to meet with a case of acute inflammation of the liver in this State, though chronic enlargement of this organ is not rare. Partial enlargement of the spleen is quite common.

With regard to the surface throughout this State, it is generally very level. There exists all varieties of soil. In the bur oak openings, in the western part of the State, the soil is a black loam, very deep and productive. There is another kind of openings in which the soil is yellow sand; these are called scrub oak openings. A large portion of the State is heavily timbered, with a good quality of soil. The timber is mostly oak, maple, basswood, walnut, and in some parts pine abounds.

Intermittents and remittents prevail for about a month or six weeks during each fall. in the region of marshes or ponds. The

character of these attacks are generally determined by the weather throughout the season. A wet spring and dry fall being favorable to their production, and that too, of a more malignant form than when the season is the reverse of this.

This has been the result of our observation during five seasons of fall practice; two of which were spent in a malarious location in Southern Ohio. During the first of these two seasons, there was a very equable distribution of rain throughout the whole spring and fall. The diseases which fell under our observation during this season, were generally intermittents of not a very severe character, readily yielding to fifteen or twenty grains of quinine after clearing the stomach and bowels. But the second of these two seasons, was ushered in by a heavy amount of rain, coming off in the later part dry and hot. The result was bilious diseases of a much more severe form than the previous fall; being more obstinate and protracted. The result of our observations in this State, as will be seen by previous remarks in this paper, are the same as here contended for, without the least variation.

The result of residing in the location previously described in this article, appears to us very conclusive evidence that these attacks were greatly influenced by the character of the season. It will be remembered that the cases occurring in the fall of 1844, were more malignant, and more obstinate, than those occurring either the previous or following seasons.

Convalescence was more protracted, and in many cases followed by the most obstinate forms of ague. One case, by way of illustration: A young married woman, who had had remitting fever in the fall, was attacked during convalescence with ague. This resisted quinine, sulphate of zinc, and arsenic, beside the whole catalogue of domestic remedies. After being thus annoyed for six months, the family removed back into the country five miles, which prevented any further repetition, one paroxysm excepted.

The theories advanced, regarding the greater malignancy of bilious diseases occurring in hot climates, over those of a more northern latitude, seems to us to be incontrovertible. There evidently exists a dissimilarity in diseases, even between this and Southern Ohio. This, at any rate, is the unequivocal result

of the limited observations which we have had the opportunity of making. And the various valuable papers upon diseases of this kind, that have appeared in this journal from southern locations, from time to time, have appeared to us farther proof of this position.

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ART. 2.—*Case of Œdema of the Glottis, following Tonsillitis.—Laryngotomy, &c.* Communicated for the Buffalo Medical Journal, by JAMES P. WHITE, M. D.

M. L. F. auctioneer, aged 39, spare man, of active habits, sent for me on the evening of March 6th; found him laboring under tonsillitis; and learned that two days previous he had taken cold by sitting most of the day near an open window; that sore throat had succeeded, and that he had taken senna and salts in operative doses, and made use of some mild astringent gargle. The attack was attended with considerable febrile irritation, and moderate local swelling, but was not thought dangerous; indeed, I was sent for rather to prescribe for the daughter, who was suffering with the same affection. The pulse was 100, not very hard or full; operated during the day; skin dry and hot. Directed him to rub the surface of the neck with the following mixture. ℞ camphorated oil, aquæ ammoniæ *aa* ℥i. mix; and as he had slept little the night previous, gave him three perspirative anodyne powders, one to be taken every 3 or 4 hours, until sleep should be procured.

7th, morning—had taken all the powders, slept well, felt refreshed, pulse 84, skin more moist and cool, and swelling of tonsils not increased. Directed the following recipe: sup. tart potass ʒii., tart antim. et potass gr. iv., mix; to be dissolved in one pint hot water, and take a wine glass every two hours. 6 P. M.—had conversed during the day considerably relative to business, and throat was more painful, fever increased, tonsils reddened and increased in size. Scarified the tonsils, directed the antimony and crem. tartar, which had been neglected during the day, to be increased so as to produce nausea, and interdicted all conversation. Saturday, 8 A. M. fever much diminished, but throat sore on pressure externally, and deglutition painful. Scarified the tonsils, applied 8 leeches to the neck, continued the solution, and moved the bowels with calomel, followed by senna and salts. 6 P. M. Bowels had moved freely, skin moist, pulse much softer, and patient expressed himself as feeling "much better but languid." Tonsils less red and painful, deglutition not very difficult, and respiration not at all interfered with. Directed him to take the anodyne, as on Thursday night.

9th; 5 A. M.—Was called out of bed in great haste, being told that the patient was dying. On my arrival, found him unconscious, face engorged with unarterialized blood, breathing nearly ceased, loud and spasmodic. I immediately raised his head, thrust the handle of a spoon between the tonsils, to ascertain if they were so large as to produce suffocation, but found them so far separated as to permit the spoon to be turned flatwise without much difficulty. At this time, the larynx and trachea were pumping like the piston of a steam-engine at each inspiration, the expiration being free, but accompanied by a flapping, stertorious sound. I immediately suspected effusion into the cullular tissue at the top of the glottis, and proceeded to expose the Crico-thyriod space, believing the operation of Laryngotomy afforded the only chance of relief, although this was but faint. By this time my friend Dr. Flint, whose residence was next adjoining, came in, when we inserted an elastic tube, and inflated the lungs, making alternate efforts of blowing into the trachea and compressing the chest, but to no purpose, the patient made not a single effort to breathe after the operation.

I learned that he took one of the Dovers powders at 6 and 9 P. M. and passed a comfortable evening; took the last powder at 1 A. M.; took drink freely and slept well until 2½, when his wife being somewhat alarmed by his loud breathing aroused him. He took at this time half a tumbler of toast water without difficulty, but remarked that his throat felt strangely, that the swelling seemed extending downward. He put his hand on the pomum adami, saying it was there, and thrust his finger quite down into the throat in an effort to feel the source of the difficulty. He soon, however, went again to sleep, and Mrs. F. whose rest had been much disturbed, also fell into a pretty sound sleep, from which she was awakened by his loud and stertorous breathing, and on going to him found she could not arouse him.

*Post Mortem Examination three days after death;* Present Drs. Josiah Trowbridge, Charles Winne, and Austin Flint.—On examining the larynx, the mucus membrane of the glottis was found greatly distended with serum, forming large bladders, and so occupying the rima glottidis as to have completely closed the aperture during inspiration.

Tonsils not greatly enlarged. Mucus membrane of the fauces of a dull red color, in the trachea healthy.

The practical deductions to be drawn from the above case are, that it is unsafe even in a mild case of Quinsy, to leave patients without some attendant awake beside them, as has heretofore been the habit of all the profession, especially during the subsidence of the active symptoms; and that in a case which becomes complicated like the one just related, the operation of Laryngotomy, if resorted to at the proper period, would offer a tolerable chance of success.

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My friend, Prof. De La Mater, of Cleveland, relates to me an instance which occurred a few years since, in which he operated successfully, although the patient seemed in articulo mortis at the time. It would seem, however, important to success, that the operation should be performed before the brain or lungs have suffered lession. *Buffalo, May* 27, 1845.

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ART. 3.—*Violent Chorea St. Viti—cured by Strychnine.* By Dr. JOHN H. GRISCOM.

The subject of the following history, presented the most violent case of St. Vitus' Dance we have ever seen. It will be recollected by many students, and others who witnessed it, as having been characterised by the peculiar jactitation of the extremities, particularly the lower, when walking, from which it was called the "Polka case:"

Eliza Holstappen, aged 18, born in Germany, single. Entered July 24, 1845. Is of large frame and robust appearance. Has had amenorrhœa four months, but otherwise has enjoyed good health, until about three weeks since her friends noticed a twitching of muscles. This increased until there was involuntary motion of all her limbs. Upon admission, she was unable to remain in be, so that she was obliged to bed kept on the floor. Her bowels being opened, she was put upon Fowler's Solution, gtt. iv. ter in die. This was increased to every two hours by the fourth day, but her motions became more frequent and strong, so that she could not be restrained on the mattress, and tore her clothes from her body. Her nights were sleepless, and she constantly screamed, although perfectly sensible.

On the 3d of August, she was put upon Carb. Ferri, which was continued for three days, the patient being at the same time freely purged with Croton and Castor Oil. This did not produce much benefit. As soon as evening came on, her motions became more and more convulsive, and her screams loud and incessant. For several nights in succession, she was obliged to be tied hand and foot to the bedstead, perfectly naked, as no covering could be kept on her. During the day, she was more pacific.

On the 12th, we began the use of Pil. Strychniae, gr. 1-16, ter in die. The effect of this was almost immediate and very marked. It was continued four days, in the above quantity with evident improvement, her nights being more quiet, and some sleep obtained.

On the 16th, the pill was increased to 1-12 gr. This night she slept for an hour or more together, in a chair.

17th, Last night she slept in bed quietly for several hours, and this morning *was able to sew.* She walks about, although her mo-

tions are still violent. Has been on the use of the medicine just one week.

19th, The last two nights the patient has slept perfectly well during the whole night, without any noise; walks now tolerably straight; and visits the other wards. Her appetite is very great. During the whole of the attack, her mind has been entirely free from any delusion. She still continues the Strychnine ½ gr. ter in die, with progressive improvement. During the last two days she has occasionally complained of headache.

Sept. 1st. Our patient rapidly improved under this treatment, continued until within a few days, when she being apparently *well*, it was stopped, and no symptom of a relapse appearing, she was to-day *discharged cured*.

The pathology of Chorea, is among the mysteries of the science. The arsenical and ferruginous preparations, and drastic purgatives, which have either one or the other, generally succeeded in relieving the symptoms, having in this case entirely failed, the determination to try the Strychnine was made on the supposition of the condition of the nerves in this disease being analogous to that in Paralysis. In the latter case, there is a total loss of power over the muscles, in the other a partial loss only. If the rapid and felicitous result of the use of Strychnine in this case should lead to its further administration in Chorea, some light may perhaps be thrown on the pathology of the disease.—*New York Med. and Surg. Reporter.*

## Art. 4.—CAUSES OF SUDDEN DEATH.

FROM A CORRESPONDENT.

The pathological conditions which most frequently lead to sudden death are at present far better understood and diagnosticated than they were during the last century. Indeed, it is only within the last twenty years that practitioners have acquired that increased knowledge of the diseases of the vascular system which has done away with some very erroneous opinions respecting the circumstances attendant upon sudden death. Still, by no means sufficient attention has been paid to the elucidation of the difficulties which beset this subject.

In the Annual Report of the Registrar-General for 1841, it is mentioned that during the years 1838 and 1839, 6708 sudden deaths became the subjects of coroners' inquests, in which the causes of death were *not ascertained* (!) and in fact, that "the cause of nearly two in three sudden deaths was not stated in the verdicts."*

* This result certainly shows a most lamentable defect in the present system of conducting coroners' inquests. The very object of the inquisition is to determine the CAUSE of death; yet we find it here admitted that in 66 per cent. of the cases no cause is returned. The fact of death merely is recorded. To us it appears that the Registration Act would answer all the purposes of the coroner's inquest in such cases. Whether the fault lie with this functionary endeavoring to reduce his expenses to the minium, or to a want of liberality on the part of those magistrates who control the expenses of coroners' inquests, is really of little moment. The evil exists, and ought to be remedied by the ordering of more frequent post-mortem examinations. On this point we shall quote the opinion of Dr. Birt Davies, coroner for the borough of Birmingham.

"The three following cases, which have occurred within this borough, strongly manifest the necessity of more extensive post-mortem examinations:—

1. A person was found either dead or dying: more than one medical man of eminence seeing the body within a few minutes of the seizure, pronounced the party to have fallen a victim to apoplexy. It was subsequently proved that the death arose from taking hydrocyanic acid!

2. A person died in what was considered by the physician and surgeon attending to have been a fit. Opium was found in the stomach!

3. A person was attended by a physician and surgeon for some hours; the illness and death were ascribed to, and treated by them for, apoplexy; but it was proved, beyond all doubt, that he died from laudanum!

Such cases very strongly attest the necessity for not suffering a small consideration of expense to deprive the act of suicide of a most salutary check, the certainty of discovery; of not suffering the Life Assurance Offices to be robbed; and, in short, of not offering an impunity to crime. That much of crime will always escape detection, and still more escape punishment, from want of a clear proof, is matter of certainty. But, as on the one hand, the

Of course this is, in great measure, due to the unwillingness of coroners to incur what they deem to be unnecessary expense and trouble by ordering post-mortem examinations to be made in cases where, although the *precise* cause of death is not ascertained, it appears evident that the individual perished from the effects of ordinary disease. Still, it is rather singular—seeing that probably in a very large number of these instances medical men were called upon to give evidence at the inquests, and were doubtless requested to offer their opinions as to the nature of the diseases of which the persons died—that the causes should not have been stated in a larger proportion of cases; for it is well known that, even where no examination of the body is made, a hint from the medical witness or the coroner, is often sufficient to decide the jury in returning an explicit verdict; such as "died from spasm of the heart," &c., &c. The following just remarks occur in Mr. Farr's admirable report:—"No definition of the sense in which 'sudden death' is practically understood by the coroners has been given; nor can we describe in any precise terms the class of cases exclusive of violent deaths, which are comprised in the abstracts of inquests. The writers even on medical jurisprudence do not state with any strictness what they mean by sudden death—whether it be in ten minutes, ten hours, or ten days; but it is generally applied to cases where persons previously able to attend to business, are suddenly deprived of consciousness, and expire in less than twenty-four hours. Understood in this sense, it is the popular opinion, that 'sudden death' is the result of apoplexy when it is not produced by violence: but many of the verdicts which ascribe 'sudden death' to apoplexy must be erroneous."

It is expressly provided in the Registration Act, that one of the particulars "required to be registered" in the official report of every inquest is "the *cause of death;*" the Act left to the proper parties—the coroners—the discretion of holding the inquest, but rendered it imperative on the jury, whenever it was summoned to sit on a body, to inquire into the particulars of the "cause of death." It is clear that, in almost every case, examination of the body by competent persons is the only means by which this can be, with any certainty, determined upon.

The same writer continues—"The most important part of the

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universal prevalence of a belief that the community will spare no pains to detect crime, and that punishment will inevitably follow upon proof, is the best means of repressing criminal attempts; so, an opposite announcement, that in the instruments of justice a narrow spirit of economy has been enforced, to the sacrifice of what is useful and efficient, must necessarily operate as a direct incitement to evil, that may be felt in every quarter from the highest to the lowest. It is fortunate that, as his own fees are secured by Act of Parliament, a coroner may, on the subject of the schedule, be considered as perfectly devoid of any personal interest."—Borough Inquests, Birmingham, 1845.

evidence of the inquest is omitted when the 'cause of death' is not investigated. The expense of inquests, which is now not considerable, would be slightly augmented, but the value of the information, and the use of the inquiry, would be increased in an indefinitely greater degree. The legislature, moreover, has left the coroners no discretion in this matter. The juries are bound by the Act to inquire into the particulars required by the Registrars; and the coroners are bound to supply those officers with the results—comprising an intelligible statement of the 'cause of death,' so far as it can be ascertained. The inquests in England will henceforward be as efficient as similar inquests in France and Germany, and be placed on a level with the present state of medical jurisprudence—to contribute to that branch of science an immense number of new, well-authenticated, and instructive facts." The generality of coroners are certainly very remiss in performing this part of the duty which they are legally bound to fulfil. There might possibly be some excuse for the omission of the procedure in those instances where it is found to be highly displeasing to the feelings of the disceased person's relatives, or where a medical witness undertakes to account for death without examining the body; but the neglect often occurs where neither of these circumstances can be alledged in its defence. Were the statue more correctly adhered to, coroners' inquests would approach much more nearly than they do at present to what they were originally intended to be—strict investigations into the causes of dissolution in persons who die under questionable circumstances.

Under such an arrangement, instances of foul play could scarcely ever pass undetected, the number of absurdly incorrect verdicts would be diminished, and a more general knowledge be obtained of the true causes of sudden death.

In the following remarks, reference is made, by numbers, to a very interesting and important set of cases illustrative of sudden death, which were published by Dr. Francis in the Guy's Hospital Reports for April, 1845.

The most frequent causes of sudden death, as occurring in persons who have appeared to be in tolerable health up to the time of the fatal seizure, and arising from spontaneous lesions of vital parts, independently of external violence or other injury further than that attending mental excitement, undue exertion, &c. are the following. (They of course nearly all originate in some one or other of the three great cavities of the body.)

*Head.*—Rupture of the basilar artery.

This is probably the only spontaneous lesion occurring within the skull that *invariably* causes immediate death.

Rupture of one of the other large arterial branches in the vicinity of the respiratory tract.

(Dr. Francis's Cases, 1 and 2.) In the first of these death occurred within five minutes, in the other within ten minutes of the time of the seizure.

Apoplexy occurring in the pons varolii.

Here death is usually instantaneous, but we have known a patient survive for more than an hour with a large clot in this situation. In this case it was found that some of the vertical strands from the medulla oblongata remained uninjured. And in cases where the effusion has been very circumscribed, and situated laterally, life has been more prolonged.

Sudden effusion of blood or pus into the lateral ventricles.

Under this condition death may occur instantaneously, or within a very few minutes of the seizure. But, in many cases, the patient lives from one to twelve hours after the effusion has commenced, remaining comatose, and suffering either from spasm, rigidity, paralysis, or other symptoms of central lesion of the brain, affecting more or less both sides of the body. In the cases where life is at all prolonged there is always reason to believe that the whole of the fluid discovered in the ventricles has not been extravasated at once.

In some cases of the two last forms of the disease the heart's action is observed to be extremely violent; this has occasionally led to the error of suppoing that a fatal lesion has occurred in the cardiac apparatus itself; but, when that is the case, the action of the heart is usually weakened.

General venous congestion of the brain and its membranes, especially in coincidence with cardiac and pulmonary obstructions. (Case 3.)

Dr. Francis relates two cases of sudden death in epileptic patients in whom none of the recent morbid appearances found upon dissection were of a nature which would have been expected to destroy life, (17, 18.) In persons suffering from any form of chronic cerebral disorder sudden death is liable to occur; the recent morbid appearances found being usually those of general venous congestion serous effusions, beneath the arachnoid or in the ventricles, or the extravasation of blood or serum around tumors or other chronic degenerations of the brain substance.

THORAX.

*Disease of the heart.*—Here the morbid changes may affect the whole body of that organ, or be confined principally to its right or left cavities or vessels.

Persons who are the subjects of any form of congenital disease of the heart, or of dilatation or weakening of either ventricle, in consequence of valvular or other obstruction, are liable to die suddenly without there being any appearances of morbid change in the organ itself beyond those which must have existed for some time previously. (Cases, 4, 5, 6.)

In most severe winters persons whose hearts are of weak structure, or whose lungs have been at all chronically obstructed, die suddenly from engorgement of the thoracic viscera. (Case 7.)*

In instances of severe chronic pulmonary and cardiac obstruction, the presence of *serum* in the pericardium or pleura may often be looked upon as the immediate cause of sudden death.

*Right side of the heart.*—Rupture of the right cavities or pulmonary artery.

These accidents are usually immediately fatal, the patient falling collapsed and gasping, life being quite extinct within five minutes. But instances of this kind have occurred in which death was not instantaneous, in consequence, apparently, of the separation tissues having, at first, been slight.

Inefficiency by rupture or ulceration of the pulmonary valves.

Sudden influx of blood to the right ventricle, or the occurrence of additional pulmonary obstruction, in any case where that cavity has become weakened from any cause.

This is especially liable to occur in consequence either of extensive pulmonary disease, theoracic deformity, (hence the liability of hunchbacks to die suddenly,) mitral contraction, or the presence of any other serious impediment to the circulation in the left side of the heart.

*Left side of the heart.*—Rupture of the left auricle—instantaneous death.

This is a rare occurrence, apparently in consequence of the great dilatability of this cavity and the strength of its lining. Dr. Francis relates a case (12.)

Rupture of the left ventricle, generally in connection with fatty degeneration or thining of the heart, or obstruction of its nutrient vessels. Death is usually, but (from the cause mentioned in speaking of the rupture of the right ventricle) not always, instantaneous.

Rupture of the coronary arteries—immediate death.

The coronary arteries have been found greatly obstructed or obliterated in cases of sudden death.

The coronary veins undergo immense dilatation without bursting, but their obstruction appears, not unfrequently, to determine fatal effusions of serum into the pericardium. Dr. Albus, how-

* It is mentioned in the Report already quoted, that about 16 sudden deaths occur in winter to 10 in summer; this, however, is probably only an approximation to the truth, as the tables most likely include many cases which are not strictly instances of sudden death. The numbers given in a subsequent table, under the heading of "Sudden death," are as follows:—"Winter, 618; Spring, 524; Summer, 381; Autumn, 574." Mr. Farr remarks, in illusion to this table:—"It has been already rendered probable that many cases, arranged under apoplexy and sudden death, are the effects of congestions in the lungs—a sort of spontaneous asphyxia, the development of which appears to be favoured by a temperature below the freezing point of water." p. 105.

ever, relates two cases in which death was occasioned by rupture of the coronary veins.* Branches of these vessels may be involved in rupture of the muscular tissue of the heart, as in the case of the late Dr. Abercrombie.

Persons in whom the left ventricle is, from any cause, much weakened or dilated, especially where the aortic valves are inefficient, are liable to die suddenly, or to be seized with symptoms of thoracic oppression, which prove fatal in a few hours (15.)

These results are usually induced either by some cause of sudden obstruction to the systemic circulation, or by some exciting or depressing influence. When patients whose hearts are in this condition remain in a state of perfect tranquillity, death takes place slowly from delay of blood in the ventricle, and pulmonary obstruction.

Sudden rupture of the cords of the mitral valve may cause death within an hour in a diseased heart; but does not appear to be suddenly fatal when occurring in a healthy one.

Sudden death from rupture of the vena azygos is rare; but cases have been recorded by Morgagni and Dr. J. Flügel.

Transverse rupture of all the coats of the aorta, or of an aneurism within the pericardium, is instantaneously fatal.

There are upon record several cases of rupture of the origin of the aorta, where hæmorrhage has eventually occurred into the pericardium, in which the patients survived for some hours (in case 13, an hour and a half) or days; but here it has always been found that a kind of dissecting aneurism has been formed, and that the outer tissue of the vessel must have given way later than the inner, the fatal pericardial effusion being, of course, consequent upon the second rupture.

Vomiting is a rare occurrence in sudden death from disease of the heart or its appendages, and it, of course, greatly complicates the diagnosis of the case; but Dr. Francis mentions this symptom as appearing in one of his patients; and we have met with one or two instances. It seems to occur when the lesion involves the pericardium, or interferes with the phrenic or pneumogastric nerves.

*Respiratory Apparatus.*—Dr. Francis gives a case (8) of purulent infiltration and œdema of the glottis, in which death took place within five minutes.

This form of disease has also been known to occur in other instances, especially in patients under treatment for syphilis, who have been taking a great deal of mercury, and in whom the principal abdominal viscera, particularly the kidneys, have become much diseased.

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* Schmidt's Jahrbucher, No. 4, 1844, page 37. Referred to by Dr. Bennett, in British and Foreign Medical Review, July 1845, page 225.

Profuse arterial hæmorrhage from the lungs may cause death, either by suffocation or by collapse.

It is very remarkable that although, in some cases of hæmoptysis, immense quantities of blood are poured at once from the air-passages, the patient escapes suffocation, while in others, the effusion of a very small quantity of blood into the lungs causes death within half an hour. In cases of the latter kind the lungs are sometimes found greatly distended with air. It is probable that, in any given case, the time required to produce suffocation, whether as the result of pulmonary disease, drowning, the inhalation of noxious vapours, or other cause, depends rather upon the strength of the heart and the quantity of the circulating fluids, than upon the absolute amount of obstruction existing in the lungs; thus slight causes produce suffocation in persons who are plethoric, and whose hearts are weak, and *vice versa*.

The bursting of an aneurism into the trachea, bronchus, or substance of the lungs, is generally fatal at the first or second gush.

The sudden occurrence of a communication between an aneurism of the aorta and the pulmonary artery, auricles, superior cava, or other part of the cardiac apparatus, is liable to cause immediate collapse and distress, and death within a few hours; but sometimes dissolution occurs at a later period, and probably never instantaneously.

Rupture of an aneurism into the pleura is followed by instant death (16).

Where the sac opens into the œsophagus, the event is usually, but not always, immediately fatal.

*Abdomen.*—In rupture or ulceration of the splenic or coronary artery into the stomach, sudden death from hæmatemesis may occur; but the time of death has varied in several cases, according to the size of the aperture and amount of the hæmorrhage.

Rupture of an aneurism of the abdominal aorta or other large vessel, into the peritoneal cavity, is followed by death within five minutes.

But when, as is far more frequently the case, the extravasation occurs *behind* the peritoneum, life may be prolonged from three or four hours to a week. Communication between an aneurism of the abdominal aorta and the inferior cava may cause death within twelve hours, but one or two patients have survived longer. Rupture of the fallopian tube, at an early stage of tubal pregnancy, usually proves rapidly fatal by hæmorrhage; but the duration of life depends upon the extent and position of the fissure. In a case of this kind related by Dr. Meadows,* the woman lived for more than 54 hours after the hæmorrhage com-

* Medicine Legale, tom. i. p. 66. Registrar-General's Report for 1841, p. 94.

menced. Here it was found that the effusion of blood was principally subperitoneal.

Extravasation of feculent matter, bile, or other irritant, into the peritoneum, may produce death from collapse in from three to seven hours, or from inflammation in from eight hours to three days; but extravasations of this kind are not invariably fatal.

The researches of M. Devergie, the Medical Director of the Morgue, have done much to remove the common error, that the greater number of cases of sudden death result from apoplexy.

The following is a summary of forty cases of sudden death carefully examined by that gentleman*:—

Apoplexy, with a clot in the annular protuberance, 1; meningeal apoplexy, 3; serous apoplexy and pulmonary congestion, 2; congestion of the brain and spinal marrow, 3; pulmonary and cerebral congestion, 12; hæmatemesis, 2; syncope, 3; rupture of the heart, 1; rupture of the pulmonary artery, 1.

The following were the causes of death in the nineteen cases related by Dr. Francis:—

Rupture of arteries at the base of the brain, 2; venous congestion of the brain, with thoracic obstruction, 1; chronic disease of the arteries and substance of the brain, 1; in epileptics, 2; external obstructions at the origins of the great arteries, 3; effect of sudden cold in chronic pulmonary disease, 1; purulent infiltration of trachea, with œdema of the glottis, 1; hæmoptysis, 2; rupture of the left auricle, 1; weakening of the left ventricle in aneurism of the ascending aorta, 1; rupture of the aorta at its origin, 1; rupture of a thoracic aneurism, 1; doubtful, 1.

It is worthy of remark, that in four out of nineteen cases recorded by Dr. Francis, the patients died while in the act of relieving the bladder or intestines. A rather considerable proportion of the cases of sudden death, depending on cerebral, thoracic, or abdominal lesions, which have come under our own notice, have occurred under similar circumstances. X.

*London Medical Gazette.*

* Medicine Legale, tom. i. p. 66. Registrar-General's Report for 1841, p. 94.

ART. 5.—*A case of Breech Presentation, with some remarks.* By W. L. SUTTON, M. D., Georgetown, Ky.

I was called, March 9th, 1845, to Nelly, a negro woman about 40 years old, in labor with her tenth child. Upon my arrival, after 1, P. M., I found the membranes protruding the vulva.—They gave way soon afterwards, when the breech was found pretty well down in the pelvis: the back part of the thighs and abdomen presenting to the abdomen of the mother. At 2, P. M., the scrotum and pelvis were beyond the vulva; the anus corresponding to the perineum. For the next half hour, little progress was made, although there was some—the penis becoming very rigid during each pain. The left ischium now began to turn to the front and separate the vulva, the right to advance over the lower portion of the sacrum and coxcyx. Although my attention was directed to the matter, I could not say which hip was first expelled. The labor going on well, I soon felt the umbilical cord, but no pulsation. I found no difficulty in drawing down a sufficient portion to guard against stretching it. It was, therefore, not suffering injurious pressure. Although there was no pulsation I did not believe the child was dead. I was therefore prepared to use all due exertions to prevent the head entering the superior strait unfavorably. I, however, had nothing to do. As the child advanced, it presented the left hip forwards; the head entered the brim of the pelvis favorably; as the labor advanced the face turned into the hollow of the sacrum, and the process was finished in as short a time as is usual in breech presentations of the most favorable character. The child did not breath for perhaps five minutes, but by using the ordinary means, respiration was fully established.

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REMARKS.—I am induced to publish this case, 1st. Because this presentation is said to be exceedingly rare. It is the first I ever saw, and none of my friends, to whom I have related it, appear to have met with one. Dr. Dewees says, Sys. Midwifery,

p. 867, 5th ed. "I have met with it but once; and from examining the returns from 'l'Hospice de la Maternite,' but one case is recorded in more than 12,000." 2dly. Because I had an opportunity to observe, and did strictly observe the process after my arrival. And 3dly. Because the directions given for action by Dr. D. in such cases, appear to me uncalled for, and therefore improper. He says, *loco citato*, "When it occurs, and we have not lost the opportunity, we should always seek for the feet and deliver by them." Again, p. 898, "There can be no doubt of the propriety, if called to the case in proper time, of always searching for the feet." I do not think that one case is a sufficient foundation upon which to lay down a positive rule; if so, I might lay it down as a rule, that the labor should not be interfered with. My rule would be, perhaps, as near right as that of Dr. Dewees. We have at least one instance to prove, that a small well formed woman may bear a child of ordinary size (as was the case on this instance,) without any unusual difficulty or delay. A footling case is certainly more dangerous to the child than one of the breech: and I do not believe that this child would have been born alive, had Dr. D.'s instructions been followed. I am at a loss to account for the absence of pulsation in the cord; but the feeling of plumpness in it induced me to believe the child was still alive.

In this case, we had from the time of the first examination to the end of labor, a full semi-rotation of the child,—the face presenting to the front of the mother at first, but expelled next the sacrum; thus exemplifying a law implied by Collins, (Prac. Treat. Mid. p. 28, Am. ed.) and distinctly stated by Rigby, (Sys. Mid. p. 212, Am. ed.) viz. "It appears to be a law in nates presentations, that whatever be the direction of the child (first or second) [it will be remembered that R.'s second presentation corresponds with the fourth of Baudeloque and Dewees,] at the beginning of labor, it will always, if not interfered with, be found with its anterior surface turned towards one or the other sacro-iliac synchondroses, when the thorax or shoulders are beginning to pass through the outlet of the pelvis. When the nates have once passed the os externum, the position of the child frequently varies a good deal, the abdomen turning first to one side and then to the other. This is especially the case in the second position, where it is more or less forward; nevertheless as labor advances,

it will almost invariably turn obliquely backwards and be born in that position."

Just here I may be allowed to enter my caveat against a practice in back presentations, inculcated by Denman and others, and apparently acquiesced in by Collins, *loc. cit.* "When the breech and inferior extremities are expelled, we should pay great attention to the position which the child holds with regard to the mother." "As soon, therefore," say they, "as these parts are expelled, if the back of the child be not turned to the mother's abdomen, the practitioner should, in extracting, turn the child so that the hind part of the head may be towards the pubes." A fair interpretation of this sentence would lead to the inference that it is desirable that the back of the child should correspond to the symphysis pubis as soon as the breech is born: whereas, it would be the very best reason to fear that the long diameter of the head was situated in the short diameter of the pelvis, and would therefore require rectification. The direction of Dewees, and most writers, that the spine of the child should correspond to the one leg of the pubis at this stage of the process is the true one.—Ramsbotham says, "I have been called upon to extract the head in many cases, where it was supposed the pelvis was distorted or the head preternaturally large, merely because the previous attendant had not been mindful of causing the head to pass through the brim, with its long diameter in the direction of the long diameter of the brim, but had brought the child down with the face backwards, so that the forehead impinged on the prominence of the sacrum; or forwards against the symphysis pubis; such an accident, besides entailing much additional pain on the mother, is almost certainly followed by the infant's death, from the pressure to which the cord must be exposed. It may be prevented by paying close regard that the face passes through the brim towards one or the other ilium, and may be remedied, when it has taken place, by turning it in the same direction. Placing the head in the most favorable position for its passage through the brim, is one of the most important points in the management of a breech case, but it is of all the duties appertaining to such a case, perhaps, the one most frequently neglected." The face then, should enter the brim looking to the ilium, and turn gradually to the sacrum during its passage to the lower strait.

ART. 6.—*On Acute Ovaritis.* By M. CHEREAU.*

The ovaries, according to the author of the memoir which we shall endeavor to condense, are liable to inflammation under three different circumstances:—

1st. Under the influence of the puerperal condition, which is the most common cause.

2d. Shortly before, or immediately after, the appearance of the menses.

3d. Under the influence of inflammation arising in, and extending from, the neighboring parts, as the womb, rectum, pelvic fascia, &c.

These three species of ovaritis he designates under the titles of; 1st, *Essential or primary ovaritis;* 2d, *Puerperal ovaritis;* 3d, *Symptomatic ovaritis.*

After the details of cases illustrative of each of these forms, M. Chereau proceeds to the consideration of acute ovaritis under its different aspects:—

§ I. *Abdominal lesions.* These occur in four degrees:—The *first* exhibit the organ slightly increased in volume, elastic, and shining; compression gives an indistinct sensation of fluctuation. Its tissue is more vascular than usual, especially in the neighborhood of those Graafian vesicles which are on the point of maturation. The fallopian tube is sometimes also implicated, being vascular and situated more than usually near the ovarium. In the *second degree*, the size of the ovary is considerably augmented; a few days are sometimes sufficient to show it increased to three or four times its natural dimensions. At this time it also becomes the seat of a "red softening," by which the *stroma* is converted into a red friable matter, resembling the parenchyma of the spleen. In the *third* and *fourth degrees*, the softening first alluded to is more pronounced, and the organization of the ovary is more or less completely destroyed, the organ being converted into a diffluent sanious pulp.

§ II. *Etiology.* The causes of this disease may be surmised by the division which the author has seen fit to make. Thus labor, the puerperal state, the menstrual orgasm, affections of the womb, are all capable, under certain circumstances of giving rise to the complaint. The author has never seen it originate from external injury to the abdomen. believing that this more frequently gives rise to chronic affections, as cysts and tumors, than to acute inflammation. Ovaritis sometimes succeeds to vaginal blenorrhagia, as has been observed by Ricord and Vidal de Cassis.

The left ovarium is more frequently the seat of inflammation than the right. In forty-five cases in which the existence of the disease was clearly ascertained, it w as situated twenty-five times

* Memoire pour servir a la Pathologie de l'Ovaire. Paris, 1844.

in the left ovary, and eleven in the right. In four cases in both simultaneously.

The author explains this proclivity of the left ovary to disease, to its promity to the rectum. The same opinion, which is also entertained by M. Tanchou, assumes the probability of truth from the fact that constipation is a frequent precursor of the inflammation, and we can readily conceive that the organ will be compressed and irritated by the impaction or passage of indurated fæces.

Other causes of ovaritis are the rheumatic diathesis, strangulation of the organ in an hernial sac, uterine injections, cold during menstruation, and perhaps the pressure of the fœtus.

§ III. *Terminations.* Acute ovaritis may terminate in resolution, suppuration, "ramollissement," gangrene, and induration. The first is the more frequent, and should be the aim of all our treatment.

*Suppuration* is also a very common event, but not so much as is generally supposed. It is an error to imagine that because the ovary or fallopian tube contains purulent matter, that there has been ovaritis as a matter of course; for it frequently happens that hydatid cysts become inflamed, and in that condition often secrete pus. The manner in which ovarian abscess becomes evacuated is various; it either remains free, in which case the pus is poured out into the abdominal cavity, or the abscess contracts adhesions with the neighboring parts, in which case it may find an exit by the rectum, bladder, fallopian tube, abdominal parietes, or even through the walls of the uterus itself. Of the first event two cases are reported by M. Montault. Andral has met with a case in which the abscess had burst into the bladder,* as has also M. Murat.† Rupture into the vagina has been met with by Cruveilhier, Dance, and Husson. *Ramollissement.* This termination is mentioned by Ferguson,‡ Montault,§ and Cruveilhier‖ who, however, doubts its dependence upon inflammation. *Gangrene* of the ovaries is alluded to in an especial essay by Sichen. Cases are also recorded by Murat, Seymour, and Velpeau.¶

§ IV. *Symptoms of Acute Ovaritis.* There are three principal symptoms, the presence of which indicate acute inflammation of the ovarium. These are pain. increase of size, and the formation of a tumor. Occasionally the enlarged ovary may be perceived through the abdominal walls, but it oftentimes descends

* Precis d' Anatomie Pathologique, t. 11, p. 704.
† Dict. des Sciences Med. t. 39, p. 17.
‡ Essays on Important Diseases of Females.
§ Journal Heb. de Med. t. 1, p. 419.
‖ Casus sphaceli ovariorum. Upsal, 1768.
¶ Repert. des Sciences Med. t. xxii, p. 574.

still deeper into the pelvic cavity, where it can only be ascertained by examination per vaginam or per anum. Having ascertained the existence of a tumor, we have next to determine its nature, and this can only be done where the rational signs of ovaritis are absent, by "exclusion."

The maladies which are liable to be confounded with enlarged ovarium, are principally the following: phlegmonous abscess in the abdominal walls, abscess of the iliac fossa and psoitis terminating in suppuration, and distension of the bowel by fecal matter. This latter is readily distinguished from ovaritis by emptying the intestinal canal, either by an injection or by purgative medicine. If, after this, scybala are not evacuated, or, being passed, the tumor still remains, it is clear that the case is not one of fecal accumulation.

Abscesses in the abdominal walls may be known by their being evidently situated without the abdominal cavity, and by the fact that the parietes do not slide freely over the tumor, but that the whole mass moves together. The diagnosis will of course be rendered more obscure when there is adhesion between the tumor and the neighboiing parts, but even in these cases, the disease may be satisfactorily determined by examination per vaginam or per rectum.

Ovaritis may be distinguished from psoas abscess by the comparative freedom with which the patient moves the thighs upon the abdomen.

There are also certain rational signs which will assist us in the recognition of acute ovaritis. These are, a pain below the pubis, between the womb and the iliac regions; the pain extends to the loins and down the thigh, and is either acute and lancinating, or dull and pulsative. The external genital organs are unnaturally hot, the vagina in particular; the os uteri is often painful upon the slightest pressure. There is often a continual desire to void the urine, the act of micturition being likewise painful. The same irritation extends also to the rectum.

§ V. *Prognosis in acute avaritis.* When taken in time, inflammation of the ovarium generally ends in resolution; if neglected or mistaken, suppuration is likely to ensue, and, in some cases, even gangrene. Puerperal ovaritis is a far more dangerous disease than the idiopathic forms, especially when it is combined with metro-peritonitis, and is induced by atmospheric influences.

§ IV. *Treatment.* This in the outset must be antiphlogistic. As acute ovaritis is generally seen in plethoric females, bleeding by the arm is almost always advisable. This may be followed by the application of leeches either to the groin or to the labia; with fomentations, saline draughts, stimulating pediluvia, soothing injections, hip-baths, &c. Calomel may be given with great effect, but should be suspended as soon as the gums are tender.

If, in spite of these means, the inflammation does not subside, and suppuration appears inevitable, we cannot do better than abide by the judicious advice of Dr. Churchill:*

"The aim of the physician in this case, should be to encourage the suppuration by means of cataplasms, constantly applied to the part.

"The formation of pus is sometimes indicated by a rigor, but more generally it cannot be discovered but by manual examination. The abscess should be opened as soon as discovered, in order to prevent its bursting spontaneously into more dangerous regions. If, however, it appears situated so high as to risk the effusion of pus into the peritoneal cavity, it is advisable to adopt a proceeding recommended by Dr. Graves in abscess of the liver, namely, to divide the parietes of the abdomen only in part, and then to apply fomentations till the matter bursts spontaneously through the artificial wound. When the matter is evacuated, the patient's strength should be supported by a nourishing diet."

* Dublin Journal of Medical Science, Sept. 1843.

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ART. 7.—*On the Employment of the Juice of the Nettle* (*Urtica Urens*) *in Menorrhagia.* By M. GINESTET.

The common lesser nettle is a very old remedy in various kinds of fluxes, but, like many other valuable indigenous plants, has fallen into unmerited disuse. The following case is an instance of its virtue in menorrhagia:—A maid-servant, æt. 17, was attacked by a profuse sanguineous discharge per vaginam during the menstrual period. She was palsied and much reduced when seen by M. Ginestet. She was made to take 30 fluid drachms of the juice of the *Urtica Urens*, and in less than half an hour the hemorrhage, which had threatened her life, was completely suspended. Other cases are related by the author of the memoir, in which the success was equally decided. In order to prepare this juice, the plant, in any quantity, is bruised, with the addition of a small quantity of water, and strained through a linen bag. The dose is from 15 to 30 drachms. One dose is generally sufficient.

## MISCELLANEOUS.

ART. 8.—*Proceedings of the Georgetown Medical Society, August 13, 1845.*

The Society met pursuant to adjournment. Dr. GIBNEY in the chair. Present—Drs. SUTTON, BARLOW, CRAIG, HALL, GIBNEY, SULLAVAN, BRADFORD, CONE and BROCKETT.

The Secretary's Report was read and accepted.

Dr. SUTTON stated the following case: A negress, at Petersburg, had a rather slow labor, commencing in the afternoon. At day break, the head of the child was born, but the shoulders not being liberated as readily as usual, I was sent for. Upon arrival, I found things in *statu quo*. I attempted to liberate the shoulders by acting on that next the sacrum; but meeting with more difficulty than I expected; I tried the other, but meeting with no better success I returned to the first, and soon succeeded. The body was then delivered, though with more difficulty than might have been expected; indeed, traction was required until the hips were freed. The child was very large and dead; but it is very probable it was alive when the head was expelled, as there was considerable discoloration of the face. There were several abrasions of the skin on the breast and abdomen, where no violence could have been done by improper force in delivery, had any been used. The mother was unable to retain her urine for several days. Inflammation of the vagina ensued, when she regained the command of the bladder. Extensive sloughing ensued, and she again lost the control of that organ. This state of things continued for some time after sloughed surfaces had healed. She now has recovered so far as to retain her urine whilst lying down. Not having seen her since her delivery, the account is from the report of her physician. I think this case interesting on two accounts. 1st. The amount of injury done to mother and child in a short space of time. It appears that labor went on regularly, but slowly until the head was expelled, and there is a very strong presumption that the child was then alive; yet in perhaps three hours, the cuticle was abraded in several

places. 2dly. Writers on midwifery appear to attach no importance to the delivery of the shoulders; and truly in ordinary cases, no difficulty exists at this stage. Dewees says, that next the sacrum is passed first. Rigby, that under the pubis. Meigs says sometimes one, sometimes the other. Govet and Rambotham are silent upon the subject. In cases of difficulty, I am of opinion that should be acted on which is next the sacrum.

Dr. Craig related the following: He was called to a tedious case of labor; occupying, in all, more than forty-eight hours in the first stage. At last, becoming rather impatient, and finding the parts in a very suitable condition for its administration, he gave the ergot with the happiest results. The child was born in about half an hour, and no unpleasant consequences followed.

Some discussion ensued on the properties of *Ergot* and its power of expelling the fœtus or placenta.

Dr. Craig detailed the history of a case in which he had given ergot with a view of hastening abortion, which he regarded as inevitable, but the result was that the hemorrhage subsided and the woman went her full time.

Dr. Sutton observed, that some three years ago, he had seen a case which he considered one of threatened abortion. The uterus had descended somewhat in the vagina, and the os tincæ projected from it; some hemorrhage and pains. He gave ergot to hasten the process. He left the patient for the night. Next day he was informed the expulsive pains had subsided. Upon examination the uterus was more erect, the body projecting from the orifice had receded, and there was less hemorrhage. No ovum was passed then or since, or any thing else so far as he knows. He now considers it a case of polypus, which probably still exists.

Dr. Brockett enquired if ergot could be regarded as an efficient agent in hastening the expulsion of the placenta. He beleived not.

Dr. Gibney had used it in one or two instances for the accomplishment of that object, but without obtaining any satisfactory results. He thought the article truly an invaluable one, but believed it had been administered far too indiscriminately, and that the profession had much to learn in reference to its nature and action.

Dr. HALL related the following case: A young lady, about 16 or 17 years of age, was taken ill with excitement of pulse and system generally, with pains resembling those of labor. Some six or seven days before, she had had a fall from a horse, and had lighted on her feet. Dr. H. gave her calomel, morphine, &c. which relieved the pains in less than half an hour, and she rested quietly. The next morning he gave her oil. She appeared convalescent. She had a second attack in about a week, of which she died. What was the disease in this case?

Dr. CRAIG related a somewhat similar case in which their was prolapsus uteri.

The question, "Which are most beneficial in local inflammations, warm or cold applications?" was then taken up.

Dr. CRAIG was in favor of warm applications. He thought they produced more immediate relief, and their effect was more permanent. Cold applications frequently produced unpleasant results.

Dr. BRADFORD concurred with Dr. CRAIG in his views. He thought, however, that the relief was as immediate from cold as hot applications, but not so permanent.

Dr. HALL agreed with Drs. CRAIG and BRADFORD in their veiws of the question.

Dr. SUTTON believed cold applications very beneficial; but to be used successfully, they must be used without interruption; otherwise the reaction which follows their use, aggravates the disease. He had seen this, in his own person, in a sprained ancle, and again in a burnt hand. Upon immersing the injured part into cold water, the pain was relieved; but upon taking it out, the suffering soon became as intense as ever. It was necessary to keep the cold application until the inflammation was overcome. In some blisters, the suffering from which was aggravated by warm poultices, he had seen the best effects from cloths dipped in ice water, and repeated *very frequently* for a half hour or hour. He had seen, recently, a blister, excessively painful and red, which was not at all relieved by warm poultices, and being on the abdomen did not admit of warm affusion; and which was promptly benefitted by cloths wet with ice water; but as they were not applied with sufficient frequency, they were discontinued, and other warm applications made without any bet-

ter success. Upon a second visit, he applied a plaster over the blistered surface, and evaporated ether from it, with marked benefit. He, however, was again compelled to leave the case before the pain had entirely subsided, and being detained longer than he expected, and the ether being all expended, application of cold plantain leaves had finished the cure. He believed that there are some cases in which cold applications, properly continued, act better than warm; but as we cannot, *a priori*, determine such cases; and as warm applications usually act very well, and require much less care in their employment, he thinks they should generally be preferred.

Dr. Barlow remarked, that he had been led to believe that cold applications were preferable as they lessened the heat and constringed the vessels. Where there was no great heat of surface, he had found warm applications best, but when the heat was intense, he had found the opposite the correct treatment.

Dr. Cone.—The question seemed to him somewhat faulty, inasmuch as it did not sufficiently distinguish between superficial and deep seated inflammations. The character and location of the inflammation would decide whether cold or warm applications should be employed.

Dr. Brockett believed the principle laid down by some of the older writers on the subject, the correct one, viz: that deep seated inflammations required warm applictaions, and superficial ones cold applications. For instance, inflamation of the substance of the brain should be treated with warm applications and that of the scalp or meninges of the brain, should receive cold water dressings. There were occasional exceptions to this rule, and perhaps, the safest principle to adopt, was to use either hot or cold, as the one or the other was most grateful to the patient.

Dr. Barlow thought that in inflammation of mucous membranes the use of any cold application was inadmissible.

Dr. Gibney remarked that long before he engaged in the study or practice of medicine, he had been forced to acknowledge the great efficacy of warm applications in local inflammations, by noticing the desirable results which followed their employment in a case which occurred in his own person, to-wit: an inflammation of the eyes,—nor had succeeding observatien or experience afforded him any grounds upon which he could base a revolution

of opinion. He was not, however, exclusive in his notions upon this subject. There were indications which he did not feel himself at liberty to disregard, and he had, therefore, on repeated occasions used cold applications without hesitation, and with pleasing results. The view which he entertained, was that the application of warmth would mitigate the violence of symptoms, by aiding the weak nerves of the capilliaries in keeping up animal temperature. This was especially the case in weak constitutions with a low grade of nervous energy. He had seen they suggestion made, and adopted as a good one.

Dr. Brockett remarked, that in the treatment of acute gastritis, arising from the use of alcoholic drinks, the late Dr. Sewall, of Washington City, was in the habit of using ice water, with the happiest results.

Dr. Bradford supposed, that the use of cold applications would lessen the amount of inflammation, and warm would have the contrary tendency.

Dr. Brockett resigned his office of Secretary and Treasurer of the Association, and Dr. T. C. Gibney, was unanimously elected his successor.

The Association passed a vote of thanks to Dr. Brockett, for his exertions and services in behalf of the Society.

The following question was selected for the October Meeting: In what stage of Intermittent fever are tonics most beneficial?

Dr. Sutton, from the committee of health, reported that the country was generally healthy. Adjourned.

T. C. GIBNEY, *Ch'm.*

L. P. Brockett, *Sec'y.*

## Art. 10.—BIBLIOGRAPHICAL NOTICES.

*The First Lines of the Theory and Practice of Surgery; including the Principal Operations.* By Samuel Cooper, Senior Surgeon to University College Hospital, and Professor of Surgery in the same College, &c. With Notes and Additions, by Willard Parker, M. D., Professor of Surgery in the College of Physicians and Surgeons in the University of the State of New York, &c. 2 vols. pp. 540,530. *New York:* Samuel S. & William Wood. 1844.

The work of Samuel Cooper, having passed through *seven* English and *four* American editions, requires no commendation to ensure the present edition an early sale. It abounds in accurate principles and practical precepts, the result of extensive experience and careful observation; and although the able author may have imbibed errors, and committed mistakes, yet these are as few as commonly appertain to similar works. It is not unlikely that this seventh edition is the *last* that Mr. Cooper will offer to the public, for although he is yet somewhat vigorous, and seems to enjoy the blessings of a green old age, still his advanced age will preclude much additional mental labor. He is not now *Senior* Surgeon to University College Hospital, as announced in the title page, but is *Consulting* Surgeon of that institution. In our intercourse with the venerable author during the past summer, it was impossible to resist the impression that *candor* was one of the peculiar traits of his character, and that great confidence can be placed in his assertions. He spoke kindly and respectfully of American Surgeons, and willingly conceded, as all enlightened and unprejudiced men must, their high standing and intrinsic merit.

Prof. Parker has not considered it necessary to make very numerous additions to Mr. Cooper's work, but we can safely say, that those which have been made are highly judicious, and in no small degree enhance the value of the original work. It is for sale by Messrs. Desilver & Burr, Cincinnati, and Mr. Chas. Marshall and Messrs. Bodley & Co., Lexington.

*The Medical Remembrancer, or Book of Emergencies; in which are concisely pointed out the immediate remedies to be adopted in the first moments of danger from poisoning, drowning, apoplexy, burns, and other accidents; with the tests for the principal poisons, and other useful information.* By EDWARD B. L. SHAW, M. R. C. S., and L. A. S., one of the Surgeons to the Royal Humane Society, and Assistant Apothecary to St. Bartholomew's Hospital. Revised and improved by an American Physician. 18 mo. pp. 112, New York, S. S. & W. Wood. 1845.

The preceding title page, which is sufficiently long for a small book, very fully sets forth its objects and contents. It seems to have had its origin in the supposition, that the *memories* of medical men, especially the *juniors*, are marvelously short, or that they are easily deprived, by an "*emergency*," of that important mental faculty. The author, however, with all due modesty, which is certainly an amiable trait of character, candidly announces, that he *ventured* to lay the work before the public, "under the encouraging assurance of his *publisher*," that it would be useful; *item*:—the said publisher thereby inferentially admitting his belief of the defective memory already alluded to.

To place the reader in possession of the plan and style of the book, we extract the first article: "*Hydrocyanic or Prussic Acid*—IMMEDIATE TREATMENT. There are four principal agents to be relied upon in the treatment of poisoning by this acid, viz: *chlorine, ammonia, cold affusion*, and *artificial respiration*.

*Chlorine.*—This is the most effectual chemical antidote, and should therefore be administered as speedily as possible; a teaspoonful or two of *chlorine water* diluted, being given, or, in the absence of this, 30 or 40 drops of the solution of the *chloride of lime* or *chloride of soda*, in a little water. The patient should at the same time inhale air impregnated with *chlorine gas*, (especially during the performance of artificial respiration,) which may be abundantly evolved for the purpose, by adding a few drops of *hydrocloric* acid to the solution of either the above mentioned chlorides. Clysters containing chlorine may also be advantageously employed." Reference is next made to *ammonia, cold affusion, artificial respiration*, electricity, &c.

It cannot be doubted that this little volume contains useful information, and might be occasionally consulted for the purpose of refreshing the memory on particular subjects; but when it is recommended as a *pocket companion*, and the physician advised to refer to it as a guide at the bedside, the whole matter becomes supremely ludicrous. Instead of making it a *pocket* companion, the physician should make it a *brain* companion, and carry its contents in his head and not in his pocket, and thus save himself and the profession from ridicule. If the *young* practition, who has just passed through his *elementary* instruction, is unable to apply these remedies, it proves, indeed, a poverty of knowledge truly lamentable.

If there are any, however, who entertain different views, and really desire a *pocket* adviser, or who wish to refer to such subjects in the least *possible* space, and with the least *possible* mental labor, they will find Mr. Shaw's book equal to any other of the same class.

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*The Domestic Management of the sick-room, necessary, in aid of Medical Treatment, for the cure of Diseases.* By ANTOMY TODD THOMOSON, M. D., Fellow of the Roy. Col. of Physicians, &c. First American, from the second London Edition. Revised, with additions, by R. E. GRIGFITH, M. D. *Philadelphia*: LEA & BLANCHARD. 1845. 12 mo. pp. 353.

This is a little work which every physician, on perusal, would feel it his duty to recommend to all the families of his acquaintance. It is a most valuable assistant to the practitioner of medicine, and should be studied by all who have the domestic charge of sick persons; and by the ladies especially.

Prepared by a scientific physician, and revised by another of high standing in his profession, in our country, it should take the place of all the so-called systems of "Domestic medicine," which are generally to be found in the family library, however scanty.

Its object is the proper instruction of the nurse, in aid of the medical attendant; and, if it were generally studied, as it should be, it would render medical practice not only more pleasant and less laborious; but also more efficient. Nothing contributes more to the success of the physician, than good and judicious nursing.

This book was placed in our hand by Mr. C. Marshall, Bookseller, Main-street. P.

*The half-yearly Abstract of the Medical Sciences: being a practical and analytical digest of the contents of the principal British and Continental Medical Works published in the preceding six months. Together with a series of critical Reports on the progress of Medicine and the collateral sciences during the same period.* Edited by W. H. RANKING, M. D., Cantab, Physician to the Suffolk General Hospital. *London.* Vol. 1. January—June, 1845. New York. J. & H. G. LANGLEY. 8 vo. pp. 372.

This semi-annual periodical is in the style of Braithwaite's Retrospect, and is furnished by the Messrs. Langley at the low rate of one dollar per aunum. But it differs from that publication by containing, in addition to other practical matters, a sketck of the progress of pathological chemistry, forensic medicine, toxicology, public hygiene, physiology, micoscopical anatomy, &c.

The value of such *abstracts*, is evicent to every busy practitioner of medicine; for while no one requires more time for study, to enable him to keep *au courant* with the advancement of knowledge, none have so little leisure to devote to it, as he has. The present publication is decidedly valuable, and deserving of patronage by the profession. The Editor has able assistance in sifting the wheat from the mass of chaff which issues from the periodical press, and the effort will undoubtedly meet with extensive encouragement. The very low price at which the American edition is offerred, puts it within the reach of every one. P.

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*Elements of Materia Medica and Therapeutics.* By JOHN P. HARRISON, M. D., Professor of Mat. Med. and Therap. in Medical College of Ohio. Vol. 2, pp. 614. *Philadelphia:* THOMAS, COWPERTHWAITE & Co. *Cincinnati:* DESILVER & BURR. 1845. This large and well printed volume completes the work of Prof. H——, the first volume having been issued some months ago.

The volume before us treats of *Bloodletting, Emetics, Cathartics, Enemata, Incitants, Restoration of the Secretions, Diaphoretics, Diuretics, Antilithics, Expectorants, Emmenagogues, Anthelmintics, Anodyne Indication, Revulsive Indication.*

It is impossible in the limits assigned to us, to go into any sort of analysis of this book. Making all due allowance for what we *think* errors in opinion, on controverted points, we have no hesi-

tation, to recommend the whole work to the study of our professional brethren. They will find in it a vast amount of information, and will be led to think and study more closely, by carefully perusing its pages.

The author merits our thanks for his ardor in the cause of medical science, and his efforts to enlighten practitioners in regard to many of the most important points of pathology and practice. We cordially wish him an extensive patronage. M.

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*A Treatise on the use of the Sympathetic Nerve and its Ganglions, with their Influences on Various Diseases of the Abdominal Viscra.* By T. B. Procter, M. D. *London.*

The above work, recently issued in London, offers some new views in relation to the physiology and pathology of the sympathetic nerve. The author adverts to the anatomy of the nerve, especially its intimate connection with the arteries, extending even to their minute ramifications; he quotes, with approbation, the declaration of Sir Charles Bell, that this nerve is *universally* distributed over the system. The general conclusion arrived at is, that the sympathetic nerve presides over the vascular function, and he adduces several important facts in confirmation of this position.

We are unable to agree with the author in every particular, but his general position seems to be sustained by the anatomy of the nerve, and numerous physiological and pathological facts. The work is well worth perusal.

# THE WESTERN LANCET.

LEXINGTON, NOVEMBER, 1845.

The Editor having returned from his European tour, and resumed the duties connected with the Lancet, begs to return his thanks to those of his patrons who have contributed to sustain the work during his absence.

It is not improbable that some irregularities have occurred, growing out of the removal of the Lancet to this city, and unavoidable errors on the part of those having charge of it, especially in regard to mailing. If such has been the case, and subscribers have not received all their numbers, they will be immediately supplied by apprising the Editor of the deficiences.

The changes in the post-office regulations seem not to be well understood by those having intercourse with Editors. Postmasters are permitted by the new law to frank all letters relating to periodicals sent to any particular office. They are also authorized to remit money to publishers in the following manner:—When money is paid to a postmaster, for an editor, it is his duty to give the person paying a receipt for the amount paid, and then to notify the postmaster at the office where ths editor resides, of the amount and to whom it is to be paid. The subscriber who has the receipt should forward it to the editor, and when this is presented to the postmaster, the money will be paid. We are very often charged with postage, in consequence of postmasters overlooking these regulations.

*East Tennessee Medical Society.*—We have been gratified to receive the proceedings of this society, as they evince a determination to elevate the profession by fair and honorable exertions. We have often had occasion to express our belief, that nothing exerted a more salutary influence over the profession than well organized medical societies; they not only elevate professional

character, by extending the knowledge of each member; but they are also most efficient aids in allaying personal differences, and harmonizing the views and feelings of all who are thus brought in contact.

The society met at Greenville, on the 2d of October, with our esteemed friend, S. B. Cunningham, M. D., in the chair, and Dr. Wm. West, as Secretary. A resolution was adopted to award a medal to the writer of the best essay on Erysipelas, as it prevailed in East Tennessee, in 1843; the essay to be read at the next meeting of the Society. Drs. Boles, Paxton and Reese, were appointed a committee to award the medal. It was also resolved, that a correspondence should be opened with the following physicians, asking for their opinions in relation to the *doses* and *modus operandi* of *quinine* in fevers, viz:—Drs. Robertson and Dickson, S. C.; Prof. Ford, Augusta, Ga.; Prof. Drake, of Louisville, Ky.; Prof. Mitchell, of Lexington, Ky.; Dr. Cartwright, of Natchez, Miss.; Dr. Jackson, of Pa.; Profs. Mott and Payne, N. Y.; Prof. Cullen, of Richmond, Va.; Profs. Bartlett and Smith, of Baltimore.

We hope to hear of the continued prosperity of this society, and offer its members the pages of the Lancet, as a medium of communicating to the profession such papers as it may be desirable to publish.

*Prevention and Cure of Lead Colic.*—M. Gendrin, lately published in a French journal, his experience in the use of diluted sulphuric acid, aided by sulphurous and soap baths, for the prevention and cure of colic induced by lead. He adds from a drachm and a half to two drachms of acid to three pints of water, which is to be consumed in 24 hours, by a patient severely attacked, every day for six successive days. If the attack be slight, three days will usually suffice, for a curative result. To cleanse the skin completely, the frequent use of the baths named above, is enjoined. A like course is ordered, to prevent attacks, only diminishing the quantity of the diluted acid, called sulphuric lemonade. Two wine glasses are to be taken daily. M.

*Vermont Asylum for the Insane.*—By the Ninth Annual Report, which is just published, the Institution appears to be in a prosperous condition. The buildings have been enlarged this season

by the increase of about eighty additional rooms, affording greater accommodations and improving the means of classification. 362 patients have enjoyed its advantages the past year, 99 have been discharged, and 263 now remain. Of those discharged, 59 have recovered. The terms are fixed at two dollars per week for the first six months, and one dollar and fifty cents per week afterwards. Patients from other States are received on the same terms as those from Vermont.

*Hare-lip in the Negro.*—We have received a note from A. B. Crook, M. D., of Greenville, S. C., in which he states that in 1841, a case of hair-lip in the negro came under his notice, and on which he operated when the child was six or eight years old. This is the only case which he has seen. They are certainly less common in the Negro than in the White race.

*Diuretic Plant.*—This plant was described by Dr. McMinn, in the September No. of the Lancet, and as he very kindly transmitted to us some specimens of it, we have ascertained, by the assistance of our friend and colleague, Prof. Peter, that it is the *Senecio obovatus* of Willidenow; Class 17, Order 2; Syngenesia Polygamia Superflua.

*Division of the Spinal Marrow.*—A case is related by Dr. Hurd, in the September number of the *N. Y. Jour. of Med. and Surg.*, in which it is presumed the *spinal marrow* was completely divided, and still almost entire recovery took place. The injury was caused by a chisel being forced deeply into the back, and in such a direction as to induce the belief, that the cord was entirely divided. The patient, finally, so far recovered as to be able to ride and discharge the duties of constable, being able to mount a horse from the ground without assistance. Indeed, sensibility and motion measurably returned. This case is a very extraordinary one, provided the spinal cord was entirely divided, but of that we have doubts. We can scarcely presume that union of the cord would so far take place, and without any change of structure, as to restore the nervous function; and as the division was not positively demonstrated, being merely inferential from the direction of the wound, we think it a reasonable doubt that entire division took place. It is more probable, that the division was *partial*, and hence the recovery.

*Ascites cured by the Injection of a Stimulating fluid into the Peritoneal Cavity.*—A very remarkable case, bearing the above caption, is detailed by John B. Sheppard, M. D., in the October number of the *American Jour. Med. Sciences.* The patient, a female aged 40, the mother of eight children, became the subject of ascites. All the ordinary remedies having failed, she was subjected to the operation of *paracentesis abdominis*, and 5½ gallons of fluid abstracted. At a second tapping 3½ gallons were drawn off, but the patient now rapidly sunk. Under these circumstances, it was determined by Dr. Clark, the attending physician, to inject an astringent infusion into the peritoneal sac, with the view of changing the action of the secretory surface. With this view, the patient was tapped the *third* time, and three gallons more removed. An infusion of the dried sliced fruit of the persimmon, (*Diospyros Virginiana*,) having been prepared, *ten ounces* were injected into the peritoneal cavity, by means of a syringe and catheter. Following the operation, considerable excitement supervened, the dropsical secretion was suspended, and what was remarkable, a profuse *bronchorrhœa* set in; this condition was checked by inhalations of chlorine, but immediately profuse sweating supervened. The diaphoresis was arrested by lime-water and stimulating friction; but the discharge from the lungs immediately returned, and the metastasis thus manifested itself alternately in the lungs and skin. After this, *gastorrhœa*, or discharge from the stomach supervened; but finally the kidneys acted promptly, and all unpleasant symptoms subsided, and the patient recovered.

This case is certainly remarkable. It is well known that injections into serous cavities, such as the iodine in hydrocele, as performed by M. Velpeau, have been successful; but practitioners have been deterred from applying the same remedies, with equal impunity, to the peritoneal sac, in consequence of its great extent, and important sympathetic relations. And the present instance, although successful, clearly exhibits the necessity for caution, and the great danger of *that* patient after the operation. If ascites depends on simple inflammation of the peritoneum, of a low character, which is often the case, this practice may frequently prove successful; but if it depends on *obstructed* action, whether of the liver or heart, it would not only prove useless,

but positively pernicious, unless the obstruction was previously removed. Would not the *Tinc. of iodine* be a more suitable substance to inject, than any of the mere *astringents?*

*Etherial inhalations, deleterious.*—As this subject is exciting some little interest at this time, we quote the following from *Mitchell's Elements of Chemical Philosophy*, published at Cincinnati, in 1832:—"Some years ago a practice obtained among the lads of Philadelphia, of inhaling the vapor of sulphuric ether, by way of sport. A small quantity placed in a bladder, was almost instantaneously converted into vapor, by the application of hot water. By means of a tube and stop-cock, the gas could be easily inhaled. In some instances, the experiment excited mere playfulness and sprightly movements; but, in several cases, delirium, and even phrenitis was induced, which terminated fatally."

Dr. Klingle, a respectable physician in the northern surburbs of Philadelphia, published a detailed account of the evils of this practice, in one of the journals; we think, in the North American Medical and Surgical Journal.

As Sulphuric ether is evidently a poisonous agent, under the circumstances named, we think the article should not be sold to lads, excepting on a written order from a responsible person.

*Use of Nitrate Lead in a case of Ulcerated Cancer.* By M. Lemaitre de Rabodanges. (*Comptes Rendres*, 11 *Aout* 1845.)

In a memoir, presented in 1841, to the Academy of Science, (French,) in which I examined the *modus operandi* of the chemical agents employed in the treatment of wounds, and other external affections, I remarked that it was by precipitating the albumen of the blood, that we succeed in arresting the decomposition of the diseased parts, and aid the formation of the plastic matter which is to reinstate them in their normal condition. Subsequent researches have only confirmed me in the opinion, so that I do not now think it hazarding too much to assert, that all the agents which precipitate albumen, without irritating the nervous system, are endowed with curative or cicatrising properties. The surgeon will find a precious resource in the employ of the metallic salts, among which are prominent the nitrates of mercury and of lead, as well as the acetate of the latter metal.

Guided by these principles, and recollecting the fortunate application which M. Ledoyen had made, of the nitrate of lead for the disinfection of fæcal matters, I have, on a recent occasion, made use of the same salt, in a case of cancerous affection, to destroy a fœtid odor, which was very annoying to the patient and to those about him, and which has resisted the use of the various preparations of chlorine. A solution of this nitrate, marking 20 to 23 degrees by the simple *pese-acide*, was employed to inject into the cavities of the sore and to wet the *charpie* which was applied to its surface. By means of this application, not only has the fœtid odor disappeared, but the fungosities have been depressed, and, for a month, during which this treatment has been pursued, a sensible improvement has been manifest; although the disease has been for a long time considered incurable. P.

*Salacine—the Surgeon General's Circular.*—It redounds to the general reputation and to the high medical character of our country, that the highest medical officer in the Government is distinguished for his zeal in the profession for which he was educated. In the following circular, issued by him, an ardent desire is manifested for determining an important question; and to accomplish this object, there is a minuteness of detail required, in the returns to be made at Washington, which must yield the most satisfactory results. We shall be happy to publish these results, whenever attainable. The following is the circular, signed by Thomas Lawson, Surgeon General.

"Sir,—The Medical Purveyor at New York has been directed to issue to those Military Posts at which miasmatic diseases are of frequent occurrence, a supply of *salacine*, (the active principle of the bark of the common *willow*,)—a medicine which has been recommended by high authorities for its *febrifuge* and *anti-periodic* virtues.

"Inasmuch as the supply of the *sulphate of quinine* is, at best, precarious, and as, moreover, it may be diminished, at any time, by an interruption of our commercial relations with foreign nations, it becomes the duty of officers of the Government who are entrusted with the health of those engaged in the public service, to use their best endeavors to provide a substitute for a remedy so highly valued, and so universally employed.

"I have therefore deemed it advisable to submit the salacine to trial on a large scale, with the view of ascertaining to what extent it may be relied upon as a substitute for the sulphate of quinine, in a case of emergency, and accordingly I have to request that you will institute a fair and impartial trial of its remedial powers, in your practice, in all cases of miasmatic disease in which the administration of quinine may not be indispensably requisite—and in such other cases as you may think proper.

"You will forward to this office a special report of your observations on the subject, on or before the expiration of the current year, noticing particularly the following points, viz:—

"1. The doses in which you have employed salacine—with their effects.

"2. The diseases, and conditions of the system, in which it has been administered—and with what effect.

"3. Whether you have found it more, or less, liable to irritate the stomach, than sulphate of quinine.

"4. Any bad consequences, you may have observed to follow its employment, attributable to the medicine.

"5. Any combinations you may have found to affect its activity; and what preparation of the system you have found necessary before its exhibition.

"6. Your opinion of its *modus operandi*.

"7. Its value as a remedy, as compared with sulphate of quinine, and other medicines of similar properties.

"8. Brief and concise notes of cases in which it has been employed in your practice—as numerous as practicable.

"It is proper to add, that as the profession at large will, doubtless, be interested in the results of these observations, they will probably be given to the public, in such form as will be most creditable to the observers."—*Boston Med. & Sur. Journal.*

A series of interesting letters are being published in the Buffalo Medical and Surgical Journal, written by FRANK H. HAMILTON, M. D., who has spent the past summer in Europe. We will endeavor to extract a part of them on some future occasion.

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Dr. ROBERT GRAHAM, Professor of Botany in the University of Edinburgh, died on the 7th of August last.

# THE WESTERN LANCET.

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## PATHOLOGY AND PRACTICAL MEDICINE.

ART. 1.—*Cholera Infantum—its pathology, treatment, and prevention. By* B. RUSH MITCHELL, M. D., *of St. Louis, Mo.*

The series of effects eventuating in the disease in question, are things of familiar observation to physicians, resident in large cities. Every year, they are called upon to combat it, under the name of "*Summer Complaint*," but, as the bills of mortality too fearfully exhibit, with limited success. Whether this springs from a limited and erroneous view of its pathology, we do not pretend to say; but that the fact is so, there can be no question.

In the remarks that we design to offer, we speak from a *full experience*. We have treated, either directly, or in connection with other physicians, over *one hundred cases*, in a *single summer*, and therefore, both as to treatment and prevention, may, perchance, be able to speak more authoritatively than, under other circumstances, would be becoming. The major part of this article was written a year ago, and had reference to pathology and treatment alone, but its publication was deferred in order that we might review, at the bed-side, what we had written. The remarks we have felt called upon to make on *prevention*, are mainly intended to refute certain opinions which have been put forth in relation to the influence of clothing; opinions at variance with our experience on this subject, and which, we think, if reduced to practice, must necessarily result in evil consequences. Our own views on the subject of prevention, have been deduced from observation and well established principles.

*Cholera Infantum* may be defined to be a disease peculiar to children, characterized by vomiting and purging, with fever of remittent type, accompanied by cerebral irritability, spasmodic convulsions, and rapid emaciation.

*Time of prevalence.*—The disease attacks children during the summer and autumnal months, though we have seen cases during December and March. It may occur at any period, from the age of two or three weeks to about four years. After this age, from unappreciated causes, it ceases to be the scourge of childhood.

*Varieties.*—Although Cholera Infantum is the term applied to a certain series of symptoms, experience has led us to classify three distinct varieties of the disease under this generic title. The following varieties of the disease can, we think, be clearly made out, viz: That proceeding from *dental irritation*—that arising from stomachic derangement, and that growing out of irritation and enlargement of the mesenteric glands. Each of these varieties is so marked by peculiarities of symptomatology, as to lead to a clear and satisfactory diagnosis. These varieties we propose to notice in regular order.

*Causes.*—The examination of the causes of the disease, will, perhaps, be more appropriately considered under each variety; nevertheless, there are some which it may be well here to notice. At present, then, we remark, that the causes of the disease may be divided into two, external and internal. Under the *first*, we would include malarious influence and atmospheric vicisitude. Under the *second*, that state of things which prepares external agents, to produce their usual diseased effects, to-wit: debility, injurious ingesta, and depraved cutaneous function. That malaria, as it is termed, exercises a potent influence in the inception of this disease will hardly be denied; at least, so far as the disease occurs in the West. In truth, the symptoms making the second variety of the disease, are, in nine cases out of ten, those of an intermittent fever, sometimes remittent, with local disturbances. Such may not be the character of the disease elsewhere, but that it is in the West, and in and about Madison, Indiana, we have long been convinced. Nor am I alone in this opinion; it has already been stated in writing. By a reference to the pages of the Western Lancet, for September, 1844, page 213, it will be seen that such is the view taken of the matter by Dr. CARROLL, of the Cin-

cinnati Orphan Asylum. He regards malaria as an efficient agent in producing the bowel affections of both children and adults. The treatment which he found most efficient was that appropriate to the supposed cause, being barks and wine. But, that the malaria should produce Cholera Infantum, it seems requisite that there should be some previous debility, or disturbance of bodily function, such as would naturally spring out of a depraved condition of the cutaneous vessels, or that which the ingestion of substances difficult of digestion, etc., is so well calculated to induce. A most frequent, nay, we should say, the most frequent source of the depraved condition of the alimentary organs, will be found in the state of the mothers milk. There can be no question, that the heat of summer exercises a deleterious effect upon the formation as well as character of that fluid. The system of the mother is oppressed and weakened; all her functions, especially secretion, are imperfectly performed, and owing to the great loss of fluid by perspiration, the secretions are of necessity less fluid than natural—their elements more concentrated. The secretion of milk enjoys no immunity from the general disorder of secretory function, and passing in a condition badly adapted to the infant stomach, but seldom fails to engender disorder there. That there is more of fact than fiction in this, is evident from the fact, that children who have been weaned are far less liable to the inroads of the disease during the succeeding summer than those who are still at the breast.

Having dwelt at as much length as is consistent with perspicuity, upon the causes of Cholera Infantum, we proceed to the consideration of the *varieties:* and first, of Cholera Infantum, arising from dentional irritation. The *special* causes of this malady are indicated by its name. It is a general fever, characterized by purging, *sometimes* vomiting, and tending *especially*, to the development of serious cerebral disease, arising from the irritation of teething. This variety of the disease, therefore, is confined in its access, to the period of dentition. *Symptoms.*—A physician is called to a young infant, or child, who appears restive or listless, with inanimate eye, great heat of the head, tongue natural, or nearly so, great thirst, constant desire for the breast, pulse little excited, stools natural, and perhaps, an occasional ejection of a little curdled milk after sucking, and the child may

or may not evince a desire to keep its finger in the mouth. This is the incipiency of the malady; and here it may be completely and almost instantaneously arrested by attention to the gums. If this be not done, in about twelve hours, the following train of symptoms will present themselves. The child is now either constantly crying or moaning, the heat of the head has augmented, and the *anterior fontanel becomes elevated*—putting the finger upon it, the brain will be found to pulsate strongly against it—the tongue now presents a scarlet tinge at the tip, the thirst continues unabated, but, from excessive repletion of the stomach with fluid, the drink is frequently ejected—the pulse becomes more frequent and jarring—passages from the bowels resembling, if not actually being, curdled milk, are frequent, and the gums present a fiery look, with, in most cases, considerable tumefaction. If the disease be not now attacked successfully, all the symptoms are aggravated, the brain becomes more and more implicated, the lientery increases, and the accession of convulsions soon end the sufferings of the little one, often in twenty-four hours from the attack of the disease. If it continues much longer, it generally takes on the traits of the *second variety*, in addition to its own. Such is a description of this form of the disease, as we have met with it in practice. We have tried to make it, and we think it is, a faithful portrait.

Post-mortem examination discloses the following appearances, in a pure case of this variety. The brain presents in its ventricles, especially the third, an undue accumulation of serum; the cortical substance is not unfrequently, unnaturally injected, and the arachnoid tunic presents spots or rather points, for they are very minute, of a scarlet hue. The alimentary tract, from the pharynx to the valve of the colon, exhibits traces of more or less congestion; which, however, is more marked at the phyloric orifice, than elsewhere. The remaining viscera, are commonly, not abnormal in appearance.

*Second Variety:*—Cholera Infantum, from stomachic derangement. As in the other variety, so here, the name affords some idea of its causation. In this form of the disease, however, the fever *frequently precedes* the evidence of derangement of the stomach. It is more often than either of the other forms, indebted for primal causation, to malarious and thermal influence; these be-

ing the first link in the chain, of which stomachic derangement is the second. *Symptoms:* In this section of the country, the physician is frequently called to a child, who presents the following phenomena: full, bounding pulse; great heat of body; dry skin; flushed face; great thirst; tossing to and fro in bed; intolerance of light; occasional stupor; slight efforts to vomit; little crying; alvine dejections abnormally thin, but slightly tinged with bile; urine scanty and high colored. These symptoms will continue some four or five hours, then gradually decline; and after, *perhaps*, a well marked interval, begin to recur. This, it will be perceived, is but little more than the history of an ordinary remittent fever. Sometimes, all these symptoms are preceded by a chill, more or less defined; and the progress of the disease varies accordingly.

The state of things above described, may continue for from one to two days, despite treatment—with or without it, and is succeeded by other manifestations. The stomach begins to sympathize with the general fever, manifested by furred tongue, with red tip; constant rejection of everything swallowed, the ejections being sometimes, though rarely bilious; usually, a thin, glairy fluid, sometimes without smell, at others, giving out a sickly odor. The passages from the bowels become both liquid, copious and frequent, as many as thirty passages in twelve hours, having fallen under our notice. The dejections are, sometimes, greenish; sometimes, white and slimy, or tinged with blood, and, in almost all cases, offensive or having a sour and putrtd smell, occasionally, membranous shreds are apparent, and particularly, in the slimy stools. When the stomachic derangement is not preceded by the fever, the symptoms are those which we have last mentioned. This variety of the disease proves fatal at no fixed period. The time when it shall occur, is determined by the power of resistance in the child, and the violence of the disease. Its most usual period of duration, however, is from two days, to three weeks. Late in the disease, the child loses all power of muscular control, and the whole system is relaxed, except the cutaneous vessels, which would seem to be constricted, as excessive, or even natural perspiration, is rather a phenomenon, than an incident. *Wasting* occurs in proportion to the march of the disease; but, is not excessive in this variety.

When it becomes remarkable, it is due to the *second* having passed into the *third* variety. In short, the conditioa of the child, is graphically summed up in the homely, yet expressive language of the nurses—"it is as limber as a rag."

*Pathological appearances:* Sectio Cadaveris discloses, in but an infinitely small number of cases, any lesion of the brain, or its appendages; and then, not of a serious nature. The digestive mucous membrane is most commonly thickened, softened and inflamed—its sub-mucous surface infiltrated; but ulceratien and excoriation are rarely found. The stomach very often presents that condition termed by the French, Ramollissement; and, sometimes, a honey-comb appearance. The mucous follicles of the large and small intestines, are often engorged and ulcerated; the liver is darker, and frequently larger than natural, and the spleen definitely congested. When this variety has continued long enough to have become commingled with the third variety, enlargement of the mesenteric glands may be detected.

*Third Variety:*—Cholera Infantum arising from irritation of the mesenteric glands. This form of the disease is distinguished by its chronic character. Although an exciting cause may sometimes light up the fires of acute action, it speedily gives place, if the patient die not during its continuance, to the peculiar progress of the disease. Another peculiarity may be remarked, that in nine cases out of ten, its invasions are limited to the scrofulous diathesis; and that the victims it selects, are usually from one to four years of age. The symptoms which signalize its presence, depend upon its origin. If it be a sequel of the second variety, it will be characterized by the symptoms of that variety, though they will soon lose their acute activity, and give place to manifestations of chronic disorder. The fever, from being remittent and violent, becomes persistent; is generally, at first continued; but towards the termination of the disease, not unfrequently assumes the hectic type.

When the disease originates spontaneously—a mode of origin, by the way, more infrequent, than from the second variety passing into it—it is announced by its own peculiar heralds. A child usually lively, and apparently healthy; but of scrofulous habit, begins, almost unnoticeably, to become listless, with depraved appetite, tumid and tense abdomen, slight flush of the cheeks in

the afternoons, palms of the hands and soles of the feet, hot; inclination to lie in one position. After these symstoms have continued for some days, most commonly weeks, the bowels become involved; the liver is torpid; the dejections are either of the color of blue or white clay; or they are green, usually pretty consistent, not remarkable for odor. Vomiting *is not* a symptom of this variety, being but seldom, or never present. Marked by these symptoms, the disease continue to progress; the dejections lose their consistency, become offensively odorous, and adhere to the vessel, as though pasty; and they are frequent in number, say fifteen in twenty-four hours. They are now most often white, having in them little balls resembling softened chalk; occasionally they are a compound color of green and white, and smell like an exhumed dead bohy. Fever which has been *continued* in form, hitherto, now passes into *hectic*, at which time, pus may, not unfrequently, be detected in the evacuations. The abdomen collapses, seems drawn towards the spine, especially at the umbilicus, emaciations progresses, and becomes excessive; and in this state of things death terminates the scene. Post-mortem discloses a hyperemic condition of the gastro-enteric mucous membrane; often a deposit of tubercle in the liver, brain, and mesenteric glands. These latter, are always found either enlarged and of scirrhous hardness, or the subject of degeneration, their substance being broken up into a creamy fluid. The efferent lymphatic vessels are abnormally large, while the afferent order are as abnormally small. The condition of the glands, and sympathetic vessels, affords an easy solution of the general wasting, so constant a concomitant of this disease. These are the chief, and most important cadaveric phenomena.

*General Prognosis.*—This is favorable or unfavorable, according to the variety of the disorder. The first form, that arising from Dentitional irritation, if met by appropriate treatment at its onset, is but seldom fatal; it becomes so, by chronical complication, and hence in proportion to the intensity of cerebral symptoms, will our prognosis be favorable or otherwise. *Elevation* of the *anterior fontanel*, is to be regarded as a sign of extreme danger. The prognosis in the second variety, is usually more favorable; sometimes it is dubious, and sometimes unpropituous where the disease is simple and uncomplicated; occurring in a

strong, healthy child, recovery is the general result. But where the vomiting and purging persist, despite all remedies, where there is much muscular debility, together with cerebral irritation, to expect a favorable termination, is to hope against hope. It is fortunate, however, that such a condition but seldom occurs, where medical aid has been had from the outset. If the case continue sometime, and an apparent convalescence is established, marked by cessation of the vomiting, and a diminution in the frequency of the discharges; and then succed increase of the diarrhœal symptoms, with puffy skin and swollen abdomen, we may suspect the passage of the disease into the third variety, and of course, our prognosis will become dubious. The average mortality of the second variety in our practice has been 1 in 24.

Our prognosis in the third variety, is generally unfavorable. Death, though slow in its march does not the less surely come. The characteristics by which we judge that a fatal issue is inevitable are, progressive debility and emaciation; the drawing of the umbilicus toward the spine; the passage of pus, chalky, or cheesy matter in the stools; and the supervention of Hydrocephalus, as the result of tubercular deposit in the brain. As an item, aiding in no small degree our prognosis, we may note the imposition of this, upon the second variety. In such a case, the tendency to a fatal issue, is fearfully increased. The average mortality of this variety of the disease we have found to be, 1 in 3½.

*Diagnosis.*—Our diagnosis of Cholera Infantum, from other diseases, will be easily made out by recurring to the general definition of the disease. After one case of it has been studied, it seems to us difficult to confound it with any other malady. Want of space forbids to enter into the special diagnosis of the varieties of the disease; and we therefore refer to the description of each that we have given, from which, being full and accurate, the physician can make the proper deductions for himself.

*Treatment.*—This will depend very much upon the species of the disease we have before us. What is good in one case, is frequently prejudical in another. It might perhaps be expected that we should pass in array before the reader, all the remedies that have at different times, and by different persons, been approved as remedies in the disease. But, inasmuch as the necessary length of this article will be more than up to journal limits,

and as we have consulted no books, designing merely to give our own experience, we trust we shall be pardoned for not entering upon so tedious an investigation. We proceed then, without further delay, to speak of the treatment applicable to the first variety of Cholera Infantum.

The indications here are few, simple, and easily carried out; they are, to relieve local irritation, and restore functional equilibrium. To fulfil the first, the gums must be well lanced; if they bleed freely, it is better than contrariwise. It matters not that the child does not seem to be annoyed by his gums, nor that the physician can discern no tumefaction there; still, if he be called in the summer months, to a case marked by the train of symptoms we have enumerated under the first variety, if he regard the safety of his patient, he will lance the gums, regardless of their *apparent* lack of irritation. If this be done early, the chances are all in favor of a removal of the symptoms of coming on disorder. As an adjuvant to this treatment, and as fulfilling the *second* indication, it is very proper to administer one or two small powders of Hyd. cum creta et Rhei, or of Cal. et Rhei, in suitable doses to the age of the patient, followed in six hours by Oleum Ricini. Thus treated, I am convinced from a full experience, most of *these* cases will be speedily cured. But, it often happens, that the physician is not called in until the cerebral system is obviously and seriously involved. Here, however, dangerous as may appear the symptoms, let not the physician despond. Begin, as in the other by a free and blood-drawing incision of the gums. After this single procedure, cerebral symptoms, which were before urgent and alarming, have, at least, temporarily subsided. At all events, a check is put upon the advance of the disease, which gives time for the administration of appropriate remedies; while at the same time one great source of irritation to the brain is removed. And now, that we have stolen a march upon the cerebral disorder, our action must be prompt and energetic. We have used our most effective agents to procure a respite, and if we avail not ourselves of it, the consequences may be exceedingly unhappy. The practice we would recommend may seem strong, but we are convinced that it is necessary. Temporizing measures, half-way remedies, may but add fuel to the flame, and even if they do not,

*time*, which is here invaluable, is lost. And, from the sympathetic irritability of the stomach and bowels, our armamentaria is limited. But though thus narrowed in our remedial circle, one remedy remains, which is efficacious. We have, by lancing the gums, removed the exciting cause of brainial disease, and now bleeding, *timely* bleeding, will, in most cases, perfect the cure. This should usually be performed from the jugular vein, one or both, as the symptoms and the discretion of the medical attendant may dictate. If the disorder within the cranium appear to be that of inflammation, bleeding from both the veins, though we have never found it necessary, may become advisable. The object is to produce a shock on the nervous system, which may alter the action going on, and this design will be attained by a large orifice from a single vein, the patient being in a sitting posture, with little loss of blood.

If, however, the cerebral symptoms are those of congestion, quantity will be our object in bleeding; at the same time, that we do not wish to unload the cranial vessels too hastily. Here, then, we take blood from a medium orifice, and in the recumbent position. This plan of treatment, aided by the application of ice to the scalp, will, we are confident, arrest the march of the cerebral disease, in a majority of cases, unless effusion has taken place. As adjuvants we may mention, leeches, either to the head or arms, blisters, etc. etc. If the skin be in a dry, harsh and constricted, state, the cold dash, or ablution, will be found eminently beneficial. For the alimentary canal, a few powders of calomel, cum creta prep. et pulv. doveri, followed by castor oil, are indispensably necessary.

*Second Variety.*—Differing, as this does, in its causation, symptom sand pathological relations from the one just under consideration, it might be *a priori* deduced, that some variation in treatment would be found necessary. And such is undoubtedly the fact. Where the first manifestation of the disease is fever, our attention of course is directed to the subduction of its phenomena. In doing this, the ordinary course of treatment is all that is requisite; care, however, must be taken that the remedies we employ for this purpose, are such as will neither unduly irritate the stomach nor bowels. Emetics, and nauseants, and acrid purgatives, must all be eschewed as a certain source of evil. Minute

portions of cal. et creta prep., followed by ol. ricini, are all that we should administer to the digestive apparatus. First in importance, not only in this case, but in the other form of the second variety, that in which stomachic derangement is the first morbid phenomenon, the physician should rely on *the cold dash.* In all the forms of the second variety, the functions of the skin are either imperfectly performed, or wholly suspended. And experience has abundantly testified to us, that if we could but get the skin right early in the disease, the after management of the case was of little trouble. How this derangement of the skin operates in producing internal disease, it is unnecessary to inquire. Experiment and experience have long since established, that no two systems of the body have a closer sympathy for weal or woe, than the cutaneous and mucous. That the skin is disordered in both forms of the second variety of Cholera Infantum, is beyond doubt. The lack of perspiration, or if present, its unnatural smell, and the dry, harsh, contracted state of the skin itself, forbids us to indulge a supposition that it is healthy. The cold dash, and it alone, we have found to be the available corrector of this state of things; and to those who have not been accustomed to use it, we earnestly recommend it; for we *know* it to be infinitely valuable.

After having succeeded by its use, in subduing the intensity of the febrile symptoms, and removing the *primum mobile* of their presence, the employment of small doses of quinine, most frequently endermically, will finish the cure. When the first appearances of derangement are those which the stomach presents, our treatment will be somewhat modified. Still, here too, the cold dash is our grand remedy; the one with which the treatment should commence. After this has been done, if the vomiting and purging persist, the following formula will, in nine cases out of ten, remove them entirely:

℞. Calomel, grs. ii,
Creta prep. " xii,
Pulv. Doveri, " iv,
Pulv. Rhei, " vi, ft. in pulv. xii, one every hour, or half hour, until the vomiting and purging cease.

The above, for a child of from six months to a year and a half old, constitutes the chief remedial agency, we have found it

necessary to employ. It is that used by almost all the physicians in Madison, Ia.; and as a consequence, although the city is exceedingly obnoxious to Cholera Infantum, the mortality but seldom exceeds 5 per cent. In my own practice, it has fallen below 3 per cent. Such remedies as astringents, we cannot deem of much utility. The essence of the disease in the earlier stages, so far as the intestinal canal is concerned, is, we are fully satisfied, that of active hyperemia; and in such a state of things, the class of astringents, as a class, seem to be wholly contra indicated. At all events, we have never derived benefit from their administration. In mild cases, we have sometimes prescribed the chalk mixture, with benefit, but it falls very short in efficiency, from the formula we have given. It sometimes happens, that after the stomachic symptoms are allayed, the febrile action attains increased vigor; this, however, is seldom the case, if, at the same time that we are administering internal remedies, we insert through the medium of the skin some quinine into the system. But if it should persist, and the other diseased manifestations be in abeyance, we will still administer the quinine in the same way, with complete success. If, however, despite all that we have done, both stomach and febrile symptoms aggravate, and a fatal issue seem impending, we may resort to astringents, as the drowning man catches at the water. And of the astringent remedies, we prefer a combination of acet. plumb., kino, and pulv. rhatania. If anything of the kind will be of benefit, this will. Meanwhile we should try blisters to the abdomen, mustard plasters along the spinal canal, from the fourth dorsal to the last lumbar; and if a flannel roller has not previously been applied, it should be forthwith. Added to all this, we may name as very important, wine, in which has been mixed some bitter tonic. If all these means fail to sustain the sinking system, we may despair of recovery; for we have done all that experience and teaching has approved to be of benefit. But we repeat again, that if the child is seen early, and the cold dash, or affusion, be resorted to, the physician will seldom be called to witness so harrowing a scene, as is the picture of a child, expiring from this disease.

We have already transgressed the bounds which are usual for articles destined to be published in a monthly journal, and must

therefore defer for the present, to remark upon the treatment of the *third* variety; as well as the all important topic of prevention.

[To be continued.]

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ART. 2.—*On the use of Mercurials in Fever.* By G. VOLNEY DORSEY, M. D., *of Piqua, Ohio.*

In the following very brief remarks, to which I beg leave to call the attention of the profession, I shall have particular reference to that common species of fever, known as bilious fever, under its various modifications of remittent, continued, gastric, congestive, &c.—and the proto-chloride of mercury or calomel, being the preparation of that mineral most commonly used, I shall deem it the article under consideration. The subject is one of acknowledged importance, and hence every ray of light should be gladly received, and every fact, or collection of facts, which can be presented, is entitled to respectful and earnest attention. Fever, in some form, makes the great mass of disease which we are called to treat, and calomel is the great therapeutic agent in its treatment. To learn then, to handle with skill, this important weapon, is, assuredly, an object of the first magnitude.

Since the introduction of calomel, into common use, in the treatment of fever, now about one hundred years;* no remedy has been subjected to greater praise and blame; to more well merited applause, and too frequently, it is to be feared, to no less well deserved censure. While in the hands of the careful and discerning practioner, it has, certainly, been an instrument of almost unbounded utility; it has, also, in its too free and indiscriminate application, by the careless and unscientific, often given rise to permanent and incurable mischief. At the same time I venture to assert, that there is no remedy in the whole Materia Medica, of equal activity, which can be put so universally into the hands of all, and so indiscriminately applied, both where it was requisite, and where it was unnecessary, in the diseases of a whole community, as has been the case with calomel in the Western and South Western sections of the United States; and yet be found, in so few cases, to have proved decidedly deleteri-

*Dr. Heberden, of London, so late as 1780, seems to have doubted the cathartic operation of calomel.

ous. This should be a sufficient response to all anti-calomel clamors, whether proceeding from those who flourish under the title of "Doctors," or from their friends and upholders. Nevertheless, the fact being admitted, that this, like all other active remedies, may in some cases be productive of injury, it becomes an important inquiry, and one of great utility in medical science, to determine how far we may be able to lay down rules for obtaining its good effects, with the least possible danger of producing any evil results.

In pursuing this subject, it becomes necessary to enquire, what are the most common evils produced by the improper use of mercurials in cases of fever? These, fortunately, are such as lie open to the view of every observant practitioner. They consist in: 1st. a degree of morbid irritation, accompanied with loss of tone of the mucous membrane of the alimentary canal, producing a disposition to hæmorrhage, this irritation extending itself to the liver, which is goaded to undue excitement, continually throwing off half-formed and ill-concocted bile, and from this organ to the skin, which is dry and indisposed to action; the tongue at the same time presenting a dry, cracked surface, and the whole system becoming morbidly excited, manifested by a general restlessness and uneasiness, not usually found in cases where this remedy, or some other equally offensive to the already irritable state of the lining membrane of the stomach and bowels, has not been exhibited. 2nd. Profuse ptyalism, accompanied with all its necessary pain and suffering; and in scrofulous habits, too often producing permanently evil consequences; it is, however, beyond doubt, that this second evil is one of much less magnitude than the first mentioned, which being also more intimately connected with the remarks I am about to make, I must devote a short space to its consideration.

Almost every one at all conversant with fever as it occurs in the miasmatic regions of the West, will admit without a desire to uphold any particular theory, that the mucous membrane of the stomach and bowels, is that portion of the system most materially affected with deranged action in this disease. Improper action of the liver, with congestion of the portal circle, is, in a vast number of cases, an attendant symptom; but by no means holds that primary and original rank among the causes

of the febrile reaction which is to be attributed to the first named derangement. Indeed, from an experience of some years in the treatment of such cases, I have been led to conclude that the symptoms usually considered as marking congestion, and indeed to some extent, the congestion itself, when it really does occur, are frequently attributable to inflammatory action of the lining membrane of the duodenum, extending itself, perhaps, up the ductus communis, and in this way preventing the free egress of the bile, choking up the hepatic veins, obstructing the whole portal circle, retaining the *materiel* of bile in the general circulation, thus giving rise to the yellow tinge of the skin; producing offensive eructations from the stomach, derpived of its wonted stimulus of bile; continued restlessness and uneasiness; indicating the oppressed state of the nervous system, from the blood not being purified and relieved of the recrementitious matter, usually carried off by the liver; and, in fine, all the symptoms of congestive fever. That this is true, is also evinced by the soreness so generally felt in the region of the duodenum, which is found exceedingly tender on pressure, although the patient may be previously aware of no local affection, and the relief, almost uniformly and promptly obtained, by the application of blisters to this part.

We believe, then, that a most important proximate cause of fever, is found in the irritated state of the mucous membrane of the stomach and bowels. This irritation may, and frequently does, proceed to actual inflammation; yet its periodical nature, subject, in every case, to more or less remission, clearly indicates that there exists in it something entirely different from ordinary inflammatory action; since this, in general, when once aroused, proceeds, invariably, to some one of its natural terminations by a steady and continued progress, unless arrested by proper remediate measures. But we have here, in fever, an irritation of the alimentary canal, tending strongly to inflammation, and which, during one part of the twenty-four hours, will exhibit many of its most urgent symptoms, as heat, violent thirst, and great tenderness on pressure; but which, running in a few hours its natural course, seems to exhaust itself, and leaves the patient for the remainder of the day, almost entirely free from any inflammatory symptoms, yet doomed with certainty to undergo the same series of suffering on the succeeding day.

From these facts, the conclusion, may, I think, be fairly deduced, that in the treatment of this disease something more is necessary, than what is usually required in cases of continued fever, which, we may fully assert, never occurs, except, where there is well marked local inflammation, and never follows as the immediate and primary effect of miasmatic impressions in this climate. It will be seen, then, that I regard the fever of which I am treating, as the result of an impression producing a periodic irritation, marked by remissions and exacerbations, but which may, by neglect or other causes, proceed to continued inflammatory action accompanied by continued fever.

We proceed then to enquire what plan of treatment may be considered most efficacious in arresting the progress of this periodic disease, and what remedies are to be used in this treatment. I answer, in common with most of my professional brethren practising in this climate, that calomel, in bilious remitting fever, is our most important and powerful agent; and that on its use, judiciously or improperly applied, depends much that we are to expect of a favorable or unfavorable result in our treatement. In regard to the peculiar action of calomel on the system, I am aware there exists much diversity of opinion, consisting of all grades, from those who believe it to be a powerful sedative, to those who deem it a direct irritant. I am not inclined to agree, precisely, with either party. The action of calomel, I hold to be irritative, though not in the sense usually understood. I have never seen anything to induce me to believe that calomel possessed a sedative influence; given in local inflammations, especially in combination with opium, it allays irritation and checks the progress of disease; but it will be admitted by all, that it does this most effectually when it produces more or less of its own specific irritation; in a word, that in order to check the progress of a well seated inflammation, the constitutional action of mercury, is in some degree, in almost every case necessary to be produced; and where this effect is not obvious and visible, we have every reason to believe from analogy, that the same constitutional affection is present, though not cognizable by our senses. The action of mercury in checking disease is, then, as we have every reason to believe, by producing a peculiar, specific irritation, that along with this effect, it has the power, perhaps by the same specific irritation, of rousing into action

the whole secretory system, and thus producing discharges capable of removing obstructions from various parts. But it is by the fact, that it does produce this peculiar irritation, that its use should be particularly regulated in the treatment of a disease where it must be applied to a membrane, already, as we have seen, at times, in a decided state of irritation, approaching to inflammatory action.

In the early or formative stage of bilious remitting fever, where there is, as yet, comparatively little local affection of the alimentary canal, active mercurial cathartics are doubtless beneficial; as they thoroughly cleanse the system and promote the proper action of the deranged viscera, as well as unload the mouths of the glands opening on the mucous membrane, which are too often obstructed by morbid accumulations, and prevented from performing their proper office. By this deobstruent action of calomel there is no doubt that many cases of fever are nipped in the bud, which had otherwise become long and protracted in their course; but when this has not been sufficient to remove the disease, which still continues to return in regular periodic attacks, it is too frequently the course pursued by practitioners to commence the use of small and repeated doses of calomel, for the purpose, as it is said, of bringing the system under its influence. The end aimed at is correct, but are the means such as, under the known modus operandi of this remedy, can be deemed reasonable. To throw into the stomach a medicine for the purpose of producing its specific irritation at the very moment when an irritation of an opposite character exists there, is assuredly unwise, when we know, that by waiting only a few hours, a period will arrive when this opposing irritation will be very much diminished; when, consequently, our remedy will be permitted to act more readily and more easily, and also without the attendant danger of injuring the whole system by administering a powerful medicine, at a time when the stomach is obviously unfitted to receive it, and when we are running the risk of producing a double febrile action; one from the disease, and one from the remedy administered. From this view of the subject, it appears, that the common practice of combining calomel with cooling diaphoretics, as nitre and antimony, is decidedly objectionable; and accordingly, several years of experience in treating the fevers of this cli-

mate, have convinced me that the omission of mercurials during high febrile action, and their careful administration during the remission, is calculated to produce their specific effect more speedily, and with the introduction of a much less quantity into the system, than by any other means. If, as all admit, this article acts particularly on the liver, and that it is almost impossible to produce its specific effect until hepatic action is aroused; then it will also be admitted, from the known sympathy existing between the liver and skin, that the time for acting on this viscus is when the skin is relaxed and disposed to act, and not when it is scorched under fever, and its functions entirely obstructed. By a course of this kind, the most severe cases of fever may usually be early removed at the expense of only a slight soreness of the gums. Let the mercurial be administered in a full dose at the close of the febrile paroxysm, combined with opium or followed by cathartics, according to the necessity of the case. The use of blisters and other ordinary means, of course, not to be omitted when deemed requisite. If it be found necessary to improve the period of remission by the use of quinine, it will be found that this article, in combination with calomel, will be borne earlier in the disease, than without such admixture.

If, however, in spite of all our endeavors to prevent undue irritation of the mucous membrane of the alimentary canal, this supervene, indicated by excessive dryness of the tongue, which is at the same time red and cracked by deep fissures, and by a total suspension of all the secretions, it is then useless, nay worse than useless, to continue the exhibition of calomel by the stomach. The skin is then the only channel by which its entrance can be effected; and a few ounces of mercurial ointment faithfully applied, will, in almost every case, produce the desired effect; restoring the moisture of the mouth and the secretions of the whole system. A most unjust prejudice exists against this mode of administering mercury, and yet it is undoubtedly the most safe and easy method which can be chosen, and productive of consequences far less severe than those attending its internal exhibition. Ptyalism brought about by murcurial friction is generally free from ulceration of the mouth, and much more manageable, than that produced by its internal exhibition; and when in long continued cases of fever, the above mentioned symptoms appear,

accompanied by gradual sinking of the system, mercurial frictions are the most efficacious means of relief, and should be resorted to without delay.

Why is it, that we so often meet the most uncontrollable cases of ptyalism, destroying the teeth and disfiguring the face, but simply from the fact, that so much mercury is introduced into the system before any effect is produced, that when finally its action commences it becomes wholly unmanagable. That mode of procedure, therefore, which can sufficiently produce the peculiar effect of this medicine to eradicate the disease, and at the same time introduce so little of it into the system, as to prevent any fear of evil consequences from its ultimate action, should certainly be adopted and most rigidly adhered to. The days of heroic doses of calomel are fortunately fast passing away; the opinion of the most intelligent portions of the profession has already numbered the periods of their existence; the rash hand which would administer calomel by the tea-spoonful, instead of being applauded for his temerity, should be rather execrated for an audacious trifling with human life, and for overleaping the barriers within which, skill and intelligence have sought to confine rashness and ignorance; and we are called upon by every principle of science, and by every feeling of humanity, to seek some rules by which to guide the action of one of our most important therapeutic agents, and by its judicious use, to avoid the evils which want of skill and want of care will occasionally produce. By this means, we shall eradicate from the community a prejudice, which is daily causing thousands to entrust their lives to unprincipled empirics, under every variety of name, too frequently, to pay with life the forfeit of their ill judged confidence. The careful use of calomel during febrile remission, and its entire omission during the febrile paroxysm, is, I believe, the rule which, if adopted, will accomplish this desirable end:—it needs only to be fairly tried to ensure its approval.

But it may be asked, do we not occasionally meet with cases of bilious fever, which are continued in their type? If any such are found, then there exists decided local inflammation; and if this be properly treated in the first place by depletion, and the action of the heart and arteries properly subdued by the lancet, or other appropriate means, then calomel, with full doses of

opium, is the remedy to which we must trust, and which will rarely, indeed, deceive our expectations.

I do not ask any particular attention to my mode of explaining the peculiar action of calomel in its cure of bilious remitting fever, it is at best but a theory, yet one which may be well supported by analogical reasoning; but I only ask a careful attention to the proposed mode of administering the remedy, as one which will amply repay a trial, and save, at once, many unpleasant *feelings* to the physician and his patient.

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## SURGERY.

ART. 3.—*A new method of Diagnosis in Cataract and Amaurosis.* By Dr. MAGNE.

It was in the year 1836 that Professor Sanson first observed the circumstance, and in 1837, he announced it in his clinical lectures, that if a light was placed before the eye of a person afflicted with amaurosis, the pupil having been previously dilated, three images would be perceived; the first, anterior, the brightest, being erect; the second, central, somewhat paler, inverted: and the third, posterior, the palest of the three, like the first, erect. The first is formed by the cornea, the second by the anterior segment of the lens, and the third by its posterior segment. Opacity of the cornea destroys all three images; opacity of the anterior portion of the capsule, the centre and posterior conea; and opacity of the posterior portion of the capsule, the posterior alone. But certain precautions are necessary to be observed: 1st. The pupil must be dilated; this is to be attained by means of belladonna, so that the pupil may be double or treble its original size. If it be necessary to obtain dilatation immediately, atropine may be employed, in the proportion of gr. j. to a table-spoonful of water, dropped into the eye. This application is followed by pain, an injected state of the conjunctiva, and an increased flow of tears; but the first is not very intense, and the two last soon disappear. The patient must be requested to keep his eyes well shut; otherwise the solution will escape with the tears, and no effect will be produced. 2d. The eye must be examined in a dark room.—These precautions taken, the three images will be seen, should cataract not exist; there are, however, two states in which they are perceived, notwithstanding this disease: (a) when the cataract is very slight, forming a species of haziness, through which the

rays of light penetrate, though with difficulty; (b) when the opacity has commenced by the periphery, affecting only a very limited portion of the lens. In the former case, the two posterior images are so pale, that this circumstance, united to the other symptoms, is sufficient to establish a diagnosis; and in the second, the patient, when requested to look at an object in various directions, ceases to perceive it, as soon as the opaque point of the lens intercepts the rays of light, and only one, or at most two, images are perceived, when the eye is examined in that direction. The two following cases are proofs of the exactitude of this opinion. In June, 1841, the Duchess of M—— came to consult Sanson, who was at that time suffering from the disease which ultimately carried him off. Being unable to examine the patient, Dr. M. was requested to do so; and the result was as follows: eyes healthy in appearance; iris moveable; pupils dilated; two posterior images almost imperceptible. Unwilling to say, positively, that he thought a cataract had commenced, the extract of belladonna was prescribed, to be used by frictions; and the next day, Sanson confirmed the diagnosis, which time has shown to be correct.—In the same year, and about the same period, Mme. B——, the wife of a member of the Institute, called upon Sanson, on account of a diminution in the sight of the left eye, and, after examination, she was requested to call again, but ere this period had elapsed, Sanson had breathed his last. After his death, Mme. B. consulted another eminent practitioner, who diagnosticated amaurosis, and prescribed accordingly. Having followed the various remedies ordered, and reaping no benefit, Dr. M. was consulted, and having examined the eye, he thought he perceived an opaque spot, and, on the next day, dilatation of the pupil having been obtained by means of belladonna, such was proved to be the case, as the two posterior lights was not visible. The diagnosis of commencing capsular cataract was confirmed by other practitioners, and still more conclusively by the progress of the disease.

*Ranking's Abstract.*

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ART. 4.—*On the Pathology of Toothache.* By Dr. HEILDEN.

Toothache may depend either upon congestion, inflammation, or a lesion of innervation. 1st. *Congestion; this may have its seat either in the membrane exterior to the fang of the tooth, in that lining its central canal, or in the ganglion, which supplies the tooth with nerves.* Congestion, when seated in the lining membrane of the fang, may be known by lancinating, throbbing pains, which are increased by any excitement of the system; these pains are variable in their character, sometimes lasting but for a few minutes, and again for as many hours, they are generally increased, to-

wards evening, and when the patient is in bed. The tooth, whose lining membrane is affected, is sensible to the touch, or to pressure, and frequently conveys the sensation of being somewhat above the level of the surrounding teeth. The frequent application of cold water to the affected tooth is one of the best means of cure that can be adopted in this form of odontalgia. 2d. *Congestion in the lining membrane of the canal, and of the dental nerves.* Toothache dependent upon these causes may be distinguished from the variety just described, by the tooth not being painful on pressure nor conveying the sensation of prominency over its fellows. It may also, be distinguished by the effect which cold water produces upon it; if the tooth be carious at the crown, cold water immediately gives relief; but if it be not so, the pain undergoes an exacerbation for some time, but under the use of the remedy it eventually disappears. Young, plethoric persons, and pregnant women, are those most subject to this form of toothache. In obstinate cases, besides the local application of cold water, it may be necessary to use the foot-bath, and administer purgatives. Where caries of the tooth exists along with this form of congestion, timely plugging must be had recourse to. All stimulants, such as the tinctures in common use for curing toothache, must be avoided here, as they only increase the mischief. *Inflammation.*—This process when occurring in the teeth of a healthy individual, will produce the phenomena of healthy inflammation in any other part of the body; in individuals affected with gout, rheumatism, or scrofula, it will present the specific character of these diseases. Inflammation of the internal lining membrane of the tooth-fang (periodontitis,) occurs much oftener in carious than in healthy teeth; it is characterized by a dull aching, rather than actual pain, from which the patient fancies he obtains relief by pressing his teeth strongly together. This dull aching after some time is exchanged into an acute, *boring* pain, which extends to the neighboring teeth; at this stage, the affected tooth seems more elevated than its fellows; and this sensation prevents perfect closure of the mouth, and to a great degree interferes with mastification. In some cases this local inflammation causes severe constitutional disturbance, heat and redness of the cheeks, severe headache, and general febrile irritation. In this state, if nothing be done to check the local inflammation, this acquires greater intensity. The acute boring pain is now changed into a dull aching attended with throbbing, if the gum about the affected tooth be examined, it will be found intensely inflamed, the tooth itself is *now* visibly longer than the surrounding ones, and loose; pressure makes the patient feel as if it were about to start from its socket. All these are evidences of suppuration at the root of the tooth, and if it be now extracted, a drop of matter will be seen attached to its root. In cases of intense inflammation of the tooth-fang, the process of inflammation may not be termina-

ted by the formation of matter; inflammation proceeds outwardly to the gum, the alveolus is absorbed, and a portion of the matter formed at the base of the tooth is thus evacuated, when the opening in the gum closes for a short time, until the matter again accumulates. Thus a sort of fistula is formed which can only be healed by the extraction of the tooth. The mischief may not be confined to the root of the tooth alone—which becomes absorbed at its extreme point and roughened—but may also extend to the jaw-bone and render it carious. It sometimes happens that the cyst containing the pus at the root of the tooth, becomes changed into a mass of pappy consistence, which, comes away with the tooth on the latter being extracted. The treatment of this variety of odontalgia must be strictly antiphlogistic. Should the local application of cold fail in completely removing all the symptoms, leeches must be at once and freely applied to the gums. Where suppuration seems inevitable, a gently diaphoretic treatment with fomentations of warm water, or warm decoction of poppies, or marshmallow, or a solution of extract of henbane, in the proportion of five or ten grains to four ounces of warm water, will be found to assist materially the maturation of the abscess; as soon as the pus has been evacuated, the diseased tooth must be extracted. It very often happens that a great number of the teeth are loosened, without any mechanical cause; this may depend either upon a sub-inflammatory affection of the lining membrane of the alveolar process, or upon that form of cynanche, denominated "Parotidea." In the latter instance, time alone will effect a cure; the former requires for its cure repeated application of leeches over the affected portions of the alveolar process.

*Wiener's Zeitschrift.*

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ART. 5.—*Treatment of Fistula in Ano by Ligature.* By Mr. LUKF.

The advantages of this method over that of the knife are: 1st. The shorter period which usually elapses before the final cure. 2d. The less pain which is felt during treatment. 3d. The absence of the dread which the knife generally inspires, and the consequent inducement which it offers to the patient to submit to effective curative treatment; and, lastly the avoidance of all hæmorrhage. The treatment is to be conducted in the following manner: An eyed probe, armed with dentist's silk, is introduced through the fistula into the rectum, from whence the silk is withdrawn through the anus, by means of a spring-catch introduced into the rectum upon the finger of the operator. The parts to be divided are then inclosed between the two extremities of the ligature, to which a small fistula-tourniquet is subsequently attached, by passing them through holes provided for the purpose.

The requisite amount of tension is maintained by a screw. Care must be taken that the ligature be not so tight as to cause more than slight uneasiness. After the lapse of a few days, ulceration of the inclosed part commences, and the tourniquet becomes loosened, indicating the necessity of the ligature being made tighter.

[Nine cases are appended, in which the proceeding was attended with perfect success.]—*Ranking's Abstract.*

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ART. 6.—*Description of a New Instrument for Ligature of Fistulæ Ano.* By DR. NELKEN.

This instrument is composed: 1st, of a rod, about 11½ inches in length, the upper third of which is divided into four equal parts, united to each other by hinges, so arranged that they can be closed only in one direction, the last being furnished with a knot, and a hole to pass the ligature; and 2d, of a tube through which the former is passed when threaded. The finger being placed in the rectum, the apparatus thus prepared is passed upwards into the fistula, until the extremity reaches the finger, the tube is then withdrawn to an extent equal to one of the four divisions of the rod; the whole is next pushed forwards, the finger in the rectum causing the rod to bend downwards as it penetrates into the intestine; the same manœure is repeated until the ligature appears at the anus, when the surgeon seizes it, and terminates the operation.—*Ranking's Abstract.*

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ART. 7.—*Ununited Francture treated by Acupuncturation.*

A case of ununited fracture thus treated, is recorded in the *Giornale per servire ai progressi.* A man of good constitution, æt. 26, met with a simple fracture of both bones of the forearm. Five weeks after the accident no union had occurred, and the limb kept in a state of perfect rest during four weeks longer. At the end of this time, finding the fragments still ununited, M. Wiesel determined upon the employment of acupuncturation, which he did in the following manner:—Between the fragments of the ulna he introduced two needles, long enough to pass completely through the false joint, and allowing these to remain in place during six days, by which time they had produced great tumefaction of the part, and caused much pain. Fifteen days after this, a similar operation was done upon the radius, which, after a few days was followed by acute pain and slight suppuration. After the application of the needles the arm was carefully supported in splints, and at the end of six weeks consolidation was found to be complete.—*Ranking's Abstract.*

ART. 8.—*On the Compression of the Abdominal Aorta in Uterine Hæmorrhage.* By M. SENTIN.

[After some general remarks upon the nature of the hæmorrhages which occur after childbirth, and respecting the history of the above operation, the author thus describes the process adopted by himself:]—"The woman is to be placed on a horizontal plane, with the head and shoulders raised, and the thighs flexed upon the pelvis, in order to relax the abdominal muscles as much as possible, and to avoid the mechanical engorgment of the uterine vessels. The surgeon, placed on the right side of the patient, uses the left hand to compress the vessel, keeping the right disengaged for any other purpose which the case may demand.

"The intestines being pushed on one side by gentle manipulation, the three fingers of the left hand are pressed firmly and deeply behind, and to the left of the uterus, nearly on a level with the umbilicus. By this plan the aortic pulsations will be evident, and further pressure is then to be made in a direction downwards and backwards.

"In order that the operator may not be too much fatigued by continued exertion, his hand may be compressed by those of an assistant."—*Ranking's Abstract.*

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ART. 9.—*On the Effects of Ergot of Rye on the Parturient Female and her Offspring.* By SAMUEL HARDY, M. D.

[Long as has been the practice of administering the secale cornutum as an obstetrical medicine, its effects, both salutary and the reverse, are far from distinctly ascertained. The object of the communication, which we shall here condense, is that of rendering our knowledge upon the subject more precise. In carrying out this object, the author investigates the action of the medicine under the following different points of view:]—

1. *As to the time the action of the ergot on the uterus commences.* From certain tables, this time appears to be in some cases as early as seven minutes after its exhibition, while in others a much longer period is required; the average time appears to be about ten or fifteen minutes. The author considers that it has always commenced within twenty-five minutes at the furthest, when the child has been expelled alive. On the other hand, if a longer time than this has elapsed, instruments have been necessary, and the

infant has been born dead. The beneficial action of the ergot is evidenced by the pains running into one another without any appreciable interval.

2. *Effect on the maternal pulse.* This part of the inquiry is one of considerable interest, and has not received the attention from practitioners that it deserves. In nineteen cases recorded by the author, there was a marked diminution in the frequency of the mother's pulse, after the administration of the ergot; and this effect generally commenced within fifteen minutes of its exhibition. In all cases in which the maternal pulse was affected, the fœtal heart underwent a corresponding change. Here a practical question naturally arises, Is ergot a safe remedy in relaxation of the uterus, when the woman is reduced by previous hæmorrhage? [The author does not give us any decided reply to this question, but contents himself with allusion to a single case in point, in which alarming prostration followed its exhibition.]

3. *The effects of ergot on the fœtal heart.* This is said to be more remarkable than the effect upon the maternal pulse, and therefore demands serious consideration. By reference to the tables, it will be found that in the majority of cases a diminution in the pulsation of the fœtal heart, followed the exhibition of ergot. The period at which this commences does not differ from that previously noticed, namely, fifteen minutes; the most usual effect noticed by the author is a diminution, in the first place, of the frequency of the pulsations, which is succeeded shortly by irregularity in the beats, or complete intermission. The author here states a practical fact, deduced from his own observations, to the effect that the child is generally lost, however speedily the delivery be completed, if the pulsations of the fœtal heart are reduced below 110, and at the same time become *intermittent.* The intermissions are a point of great importance in this statement, for the reduction of the pulse below 110 without this concomitant is not necessarily a fatal symptom.

Many different opinions have been broached as to the modus operandi of the ergot in destroying the life of the fœtus, some attributing it to the powerful compression exercised by the uterine walls, others to a specific poisonous effect of the medicine. The author thinks that each opinion may, to a certain extent, be correct, but leans evidently to that which attributes it to the poisonous qualities of the ergot.

The depressing effects of ergot upon the fœtal heart are so great, that a considerable time elapses after birth before the child can be restored. The author has observed that children equally weak are restored to animation with much less difficulty when ergot has not been given.

The author, in alluding to the proper time at which the ergot should be given for the purpose of restraining or preventing "post partum" flooding, states, that there are three periods at

which the medicine may be administered;—first, when the head is about to pass; secondly, after it has been expelled; and thirdly, as soon as the index-finger can reach the insertion of the funis into the placenta.

4. *The state of the uterus and lochial discharge:*—After the use of ergot, the uterus has frequently been found much larger than in ordinary labors, as has been remarked also by Dr. Johnson. The lochial discharge was sometimes pale and scanty. The children which are born alive usually do well.

The mode of administration of the ergot varies with different practitioners. The plan adopted by the author is to infuse half a drachm of the powder in three ounces of boiling water, and after straining, to add ten or fifteen grains of fresh powder with a little sugar. This dose is repeated in twenty minutes, and if the uterus does contract well is given a third time.

[This interesting paper concludes with five tables arranged under the following heads:—1. Cases in which, after the exhibition of the ergot, the labor was terminated, the children being alive, by the uterine efforts *alone*. 2. Cases in which the children were born alive, but the application of the forceps, or vectus, became necessary. 3. Cases in which the uterus expelled the children still-born. 4. Cases where the still-born children required instrumental extraction.—*Ranking's Abstract.*

## ANATOMY AND PHYSIOLOGY.

ART. 10.—*Negative Influence of the Cerebro-Spinal fluid on Locomotion.*

[The following experiments were performed about the time we visited Paris last summer, and they created some attention from their novelty. We think, however, that further experiments are required, to confirm the conclusions of M. Longet.

*Ed. Lancet.*]

M. LONGET communicated to the French Academy of Sciences, June 16th last, a notice of some experiments relative to the abstraction of the cerebro-spinal liquid and the influence of the posterior cervicle muscles on locomotion, by which he proposed to point out an error and to establish a fact. It is generally admitted by physiologists for twenty years past, that the evacuation of the cerebro-spinal fluid disturbs locomotion very remarkably. The method pursued to evacuate the cerebro-spinal liquid has been to open the dura mater and the arachnoid, between the occipital bone and the atlas, after having divided the soft parts,

covering the occipito atloid space. When the liquid is evacuated, and the animal is let loose, it staggers, it is said, as though it were intoxicated. M. Longet divided the soft parts down to the occipito-atloid ligament, which latter structure was left intact, *and consequently without evacuating the cerebro-spinal fluid*, in the horse, the dog, and the rabbit, the animals were placed in the horizontal position, and to M. Longet's astonishment, he observed precisely the same disturbance of the functions of locomotion, the same unsteadiness in walking which had hitherto been always attributed to the abstraction of the cerebro-spinal fluid. A counter experiment, by evacuating the cerebro-spinal fluid without dividing the muscular and ligamentous tissues of the back of the neck, was neccessary to test this result. M. Longet removed one of the vertebral laminæ in the middle of the dorsal region. After the operation there was some weakness in the posterior extremities, in consequence of the muscular wound, but this weakness was in no degree increased by the evacuation of the fluid, and moreover the animals did not present any of the peculiar and very characteristic staggering observed in the other series of experiments in which the soft parts of the back of the neck were divided.

M. Longet concludes from these experiments—1. That an important influenee over the functions of locomotion has been erroneously attributed to the cerebro-spinal fluid, which, in point of fact, exerts no such influence. 2. That the division of the muscles and ligamentuous tissues of the nucha causes animals to stagger as though they were drunk; and that the effects attributed by previous experimenters to the abstraction of the cerebro-spinal fluid arose from the division of those parts.

*Gaz. Med. de Paris.—Amer. Jour. Med. Sciences.*

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## ART. 11.—*Secreting Structures.*

The following compromises an abstract of the chief points contained in an excellent paper by Mr. GOODSIR, relative to the function of secretion as well as the structure of secreting organs.

1st. Secretion is essentially a function of nucleated cells. The cells endowed with this property of secretion possess a peculiar organic power by which they can draw into their interior certain kinds of materials varying according to the nature of the fluid they are destined to secrete. Some cells have merely to seperate certain ingredients from the surrounding medium, others have to elaborate within themselves matters which do not exist as such in the nutritive medium.

2d. Though secreting cells thus differ in the nature of the fluid which they secrete, (as whether milk, bile, saliva, or other,) their structure seems to be nearly the same in all cases; each

consisting, like other primitive cells, of a nucleus, cell-wall, and cavity.

3d. The nucleus seems to be both the reproductive organ by which new cells are generated, and the agent for separating and preparing the secreted material. The cell-cavity seems destined chiefly to contain the secreted fluid until ready to be discharged, at which time, the cell then matured, bursts and discharges its contents into the intercellular space in which it is situated, or upon a free surface, as the case may be.

4th. The mode of secretion in glands, of which the testicle of the *squalus cornubicus* may be taken as a type, seems to be the following.* Around the extremities of the minute ducts of the glands are developed acini or primary nucleated cells, each of which as it increases in size has generated within it secondary cells, the product of its nucleus. The cavity of the parent cell does not communicate with the duct on which it is situated until its contents are fully matured, at which time the cell-wall bursts or dissolves away, and its contents are discharged into the duct. From this constant succession of growth and solution of cells, it results that the whole parenchyma of a gland is continually passing through stages of development, maturity, and atrophy, the rapidity of which process is in proportion to the activity of the secretion. There seems, therefore, to be no essential difference between the process of secretion and the growth of a gland; the same cells are the agents by which both purposes are effected; the parenchyma of glands is chiefly made up of a mass of cells in all stages of development; as these cells individually increase in size and so constitute their own growth as well as that of the common glandular mass, they are at the same time elaborating within themselves the material of secretion, which, when matured, they discharge, by themselves dissolving away. There are a number of germinal spots or centres in a gland from which acina or primary cells are developed.

5th. The true fluid of secretion is not the product of the parent-cell of the acinus, but of its included mass of secondary cells, which themselves become primary secreting cells, and form the material of secretion in their cavities. In some cases these secondary cells pass out entire from the parent cell, constituting a form of secretion in which the cells possess the power of becoming more fully developed after being discharged and cast into the duct, or cavity of the gland.

6th. In the order of the glands, which consist of follicels more or less elongated, the following is the arrangement:†—At the

* Conglomerate glands in general, as the salivary glands, pancreas, &c., may be included in this class, though individual differences as to the arrangement, and other peculiarities of the cells, occur in each.

† Under this class may be included the follicular glands of the mucous membrane of the stomach, &c.

blind extremity of each follicle is situated a germinal spot, at the centre of which are constantly or periodically developing nucleated cells. These cells, as they become developed, tend towards the open extremity of the follicle. At first they are simple nucleated cells, but as they advance they gradually assume the characters of primary secretory cells, and contain secondary cells in their interior. When fully matured and arrived at the attached extremity of the follicle, the primary cells burst and allow their contents to pass into the branch of the duct to which the follicle is attached. Each follicle is virtually permanent, though both its contained cells and its walls are continually undergoing change, receiving development and addition at the blind extremity, being absorbed and disappearing at the other.

7th. Mr. Goodsir considers that the process of original development of glands in the embryo is identical in its nature with the growth of a gland during its state of functional activity. The blastema which announces the approaching formation of a gland in the embryo, in some instances precedes, and is in other instances cotemporaneous with, the conical blind protusion of the membrane upon the surface of which the future gland is to pour its secretion. In certain instances it has been observed that the small branches of the ducts are not formed by continued protusion of the original blind sac, but are hollowed out, independently, in the substance of the blastema, and subsequently communicate with the ducts. It appears highly probable, therefore, that a gland is originally a mass of nucleated cells, the progeny of one or more parent-cells, and that whether the membrane in connection with the embryo of the glands sends a conical protusion into the mass or not, the extremities of the ducts are formed as closed vesicles, and then nucleated cells are formed within them, and are the parents of the epithelium cells of the perfect organ.

*Ranking's Abstract.*

## BIBLIOGRAPHICAL NOTICES.

ART. 12.—*The Chemistry of Man.* By Dr. J. FRANZ SIMON, Fellow of the Society for the advancement of Physiological Chemistry at Berlin, etc. Translated by THOMAS E. DAY, M. A. & L. M., Cantab. To be complete in Two Parts, Part I. *Philadelphia:* Lea & Blanchard, 1845. 8vo. pp. 292.

The obvious importance of Animal chemistry, as a separate department, and in its relation to Physiology and Pathology, is quite sufficient to secure the attention of all medical men. It is not sufficient that we learn something of the *exterior* of medical science; that we learn to recognize a *few* of the leading facts in physiology and pathology, and the co-ordinate departments; but such is the rapid extension of knowledge in these departments, that the time is not far distant, when he who clings to antiquated notions and exploded dogmas, regardless of the daily accumulation of new and important principles, will find himself classed with the past ages, instead of being boldly in front and identified with modern discoveries, We have no intention of intimating, that nothing is *true* but that which is *new*; nor is it our intention to assert, that all which is new can be regarded as true; on the contrary, we simply declare, that vast and important accessions have been made to medical science as the fruits of modern investigation, and that we now occupy a position more favorable to certainty in results, than we have at any former period.

Perhaps the most remarkable and brilliant changes are those which relate to general anatomy, physiology, and organic chemistry, the latter of which is brought to our notice, at this time, by the work of Dr. Simon.

This work was translated by Mr. Day, of London, and published by the Sydenham Society. The translator, however, has not restricted himself to merely turning the work into English, but he has made many important additions. These consist of an *Introduction*, running through 79 pages, devoted to the chemical and organic constituents of the animal body, and short notes through the work.

The introduction of Mr. Day, discusses, first; the *mineral* constituents, and second; the *organic* constituents of the animal system. The division of organic constituents, includes, protein, albumen, fibrin, casein, pepsin, ptyalin, gelatin, pyin, coloring matters of the blood, bile and urine, bilin, urea, uric acid, hippuric acid, uric oxide, and cystin, all of which are termed *nitrogenous* compounds. This is followed by the *non-nitrogenous* compounds, consisting of more than twenty articles.

The translator describes these different constituents of the body with clearness and accuracy, which will render it a good elementary work on this subject.

The work proper, or that portion of it by Dr. Simion, opens with an analysis of the compound animal substances, which occupies chapter first. Chapter second, which includes all the remainder of Part I, relates exclusively to the blood. The author first discusses the chemical character and relations of the blood; next, its physiological relations, and lastly its diseases. This chapter occupies 213 pages; and if the remainder of the work were extended in like proportion, it would seldom be read; but we presume this is the most prolix part of the treatise.

That part of organic chemistry which treats of the diseases of the blood, opens up a field of inquiry of vast importance and interest. Innumerable facts show conclusively, that the blood becomes diseased under various circumstances, At one time the *fibrin* is found to be materially *increased;* under other circumstances the same constituent is observed to be greatly diminished; and the blood-corpuscles, and other constituents, undergo similar changes. Now, in view of the fact, that these varying conditions of the blood, exert each an influence peculiar to itself, it becomes a matter of the first importance to become familiar with these changes, and to learn their due import.

It is a question of no small moment, to determine the relationship of these changes in the fluids to the solids; in other words, to be able to designate which holds the priority. We are not unaware, that much useless discussion has arisen from the dogmatic doctrines of the exclusive humoralists, and the exclusive solidits; and that while each is contending for the supremacy of his own opinions, neither one should be regarded as exclusively true. Without stopping to urge this intricate subject, we may

be allowed to say, that neither one nor the other can be right. That the blood is often diseased, the most common observations abundantly prove; and that it is possible for it to be *primarily* affected, we cannot deny. The physiology of the blood-corpuscles—their ability, upon the principle of endosmose and exosmose to absorb and give out fluid or gasses, show, that it is possible for them to become the first link in the diseased series. This, however, is probably not common. As a general remark, we may say, that the blood being formed by the action of the solids, and its constituent elements varying with the state of the different organs and tissues, it seems to be beyond doubt, that the fluids are secondary in diseased action. And we refer to the subject in this connection, for the purpose of stating, that the *student*, who should for the first time read a work on disease of the blood, could come to no other conclusion, than, that this fluid was alone affected, without reference to the state of the solids. An impartial view of this subject will, we think, result in the conviction, that, in a vast majority of instances, the solids are *first* deranged, and the fluids suffer as a consequence of that primary affection.

The authors researches have been profound and extensive; he has instituted perhaps as many quantitative and qualitative analyses, as almost any other chemist; and hence, in view of these original investigations, combined with undoubted capabilities, his opinions will be deservedly held as of high authority.

Notwithstanding these remarks of approbation, we must add, that the author is more prolix than his subject demands, and frequently annoys the reader by introducing the analyses of others, when they differ so little from his own, as to produce no sort of interest. There is too, an unnecessary minutiæ—an interminable division of subjects, and an exalted degree of *technicality*, that is wearisome to the reader, and which points at once to its *German* paternity.

As a *whole*, however, we can but commend this treatise on the "Chemistry of Man;" and we shall look with anxiety for the appearance of Part II, commending in the meantime the close study of Part I.

Several reasons combine to render Dr. Simon's work peculiarly valuable. In the first place, the author evidently understands

his subject, and discusses it with great ability; in the next place, his opinions have been formed, in a great measure, from original investigations; and lastly, he seems to have no theories beyond facts—no dogmas to sustain at the expense of truth and principle; but he enters upon the investigation, like a true philosopher, and the result is such as we have seen.

For sale by C. MARSHALL, Main-street, Lexington.

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ART. 13.—*A Manual of Auscultation and Percussion.* By M. BARTH, Agregé to the Faculty of Medicine of Paris, &c., &c., and M. HENRY ROGET, Physician to the Beaureau Central of the Parisian Hospitals, &c., &c. Translated, with Additions, by FRANCIS G. SMITH, M. D., Lecturer on Physiology in the Philadelphia Medical Association, &c., &c. *Philadelphia:* Lindsay & Blakiston. 1845. 12 mo. pp. 160.

This little work will no doubt prove serviceable to the profession. As a general remark, we have no great fondness for *manuals;* but in relation to Auscultation and Percussion, so much apathy exists, on the part of many practitioners, that unless the whole subject is presented in a nut-shell, it will receive but little attention.

This manual, is the resumé of Barth and Roget's work on this subject, an elementary system of great value. It is unnecessary to enumerate the contents of this work, further than to say, that it is strictly elementary, and is so arranged as to convey to the student, an accurate, yet condensed view, of auscultation and percussion, in their most extended applications. Plain and simple rules are given, by which the merest tyro may become, with proper diligence, an expert auscultator. We would strongly commend it to the student who is desirous of becoming familiar with the elements of this department. The translator has evinced judgment and ability, and the publishers have executed the work in a creditable style.

For sale by C. MARSHALL, Main-street, Lexington.

ART. 14.—*Urinary Deposites, their Diagnosis, Pathology, and Therapeutic Indications.* By GOLDING BIRD, A. M., M. D., Assistant Physician to, and Lecturer on Materia Medica at, Guy's Hospital, &c., &c. 8vo. pp. 227. *Philadelphia:* Lea & Blanchard. 1845.

The English edition of Dr. Bird's Treatise, from which the present is a reprint, was noticed in the June No. of the Lancet, p. 80; it is, therefore, unnecessary to say more at this time, than to announce the American edition, and to reiterate the favorable opinion formerly expressed. It affords us pleasure to state, that the American publishers have succeeded in obtaining a faithful reprint of the text, and that the engravings have been accurately copied. It should be in the library of every physician.

For sale by C. MARSHALL, Main-street, Lexington.

# THE WESTERN LANCET.

LEXINGTON, DECEMBER, 1845.

*The Western Journal of Medicine and Surgery.*—In the October number of this periodical, we observe a paragraph, occurring in an obituary notice of the late Prof. RICHARDSON, of which we may justly complain. It is as follows: "But Dr. Richardson, while he was sensible of the superior advantages which this school (the Louisville Medical Institute,) would enjoy, made up his mind to remain in the institution which he had been instrumental in building up."

We cannot but express our deep regret to witness the introduction of *such* a paragraph, on *such* an occasion, and into *such* a journal. It certainly explains no part of the history of Prof. Richardson's life, has no relationship to his character as a teacher, and none to his connexion with the public as a physician. Why then should it have been introduced? Obviously, for the purpose of injuring a rival medical school. It will certainly be regarded as a unique specimen of ill-feeling, which would introduce an *electioneering* paragraph, into an obituary notice of a lamented member of the profession, and a former colleague.

We have ever viewed the differences between members of the profession, and especially those occupying professorial chairs, and conductors of scientific journals, as prolific sources of degradation; and we have ever used our humble influence to repress such feelings and actions, under the firm belief, that nothing contributed so directly to depress the regular profession and to sustain empericism. Entertaining these feelings, it was with peculiar satisfaction, that we received the proposition of the *Senior Editor* of the Journal, to unite with him in suppressing the bickerings between the two schools. But events prove that interests are too strong, or principles too weak, to enforce such

salutary regulations; and it now seems, that until a change comes over the spirit of *some* of those concerned in these transactions, that the profession will continually be annoyed, and injured, and degraded, by these unfortunate ebullitions of ill-feeling. If the members of the Louisville Faculty are determined to continue this course, we appeal to them in the name of every interest of the profession, to seek some other medium of communication, and not to soil the pages of a *Medical Journal* with such controversies, which must necessarily draw forth a response. In relation to the assertion contained in the obnoxious paragraph, we can only say, that we know not what views Prof. Richardson may have expressed to the writer; but this we do know, that during our short association with him, he always *decidedly* and *emphatically* expressed the contrary opinion.

As this subject has been so improperly introduced by our cotemporary, we feel under the necessity of laying before our readers some extracts from an article by Professor CALDWELL, published in the Transylvania Journal, vol. 7, p. 5, entitled "Thoughts on the impolicy of Multiplying Schools of Medicine." The author of this essay, is justly regarded as one of the ablest men of our country; and having had opportunities of becoming perfectly familiar with the facilities for instruction in the large cities of the United States and Europe, we must concede to his opinions great weight. He says:—

"As respects the policy of erecting another medical school in the State, we are strangers to any thing calculated to recommend it. In our opinion, it is exclusively unwise. That it would lower the tone of medical education, and the general standard of the profession throughout the State, cannot be doubted, by any one, who has a competent knowledge of the subject. This it would do by rendering medicine comparatively a trivial pursuit; lessening its honors and emoluments, and ultimately consigning it to an inferior class of men."

"Nor can the creation of another medical school, if it in any measure succeed in attracting pupils, fail to produce the mischief indicated. The State will be a "house divided against itself," and must suffer accordingly. The issue will be a civil war in the Profession, with all its bitterness and pernicious effects. The elements of strife are already collecting, and, should matters go on, in the same spirit in which they have begun, an explosion is inevitable."

"It has been often asserted, and, as far as we know, never

publicly contradicted, that Louisville and Cincinnati are more easy of access to the medical pupils of the west than Lexington. The reason assigned is, that the two former cities, situated on the river, are accessible by water, while the latter, being remote from it, is not.

"That this opinion should be entertained by any one at all acquainted with the subject, is matter of surprise. *It has not the slightest foundation in truth.* It is easy to show, and, should the question be further agitated, with a view to injure Transylvania, we are prepared to show, that, to a very large majority of the medical pupils, who are now educated in the West, Lexington is easier of access, than either Louisville or Cincinnati. The pupils can reach it from their homes, in a shorter time, more comfortably, at less expense, and without incurring half the risk from accident and sickness. To prove all this hereafter, should it become necessary, we shall derive our testimony chiefly from three sources; the geography and bearings of the States that send medical pupils to the western schools; the low stage of water in the Ohio, and the difficulty and comparative danger of navigating it in the autumn, the time at which the classes assemble; and *actual experience*, whose evidence never deceives. It is a well known fact, that those young gentlemen, both of the present and of former classes in Transylvania, who have experienced the most tedious, uncomfortable and costly journies, and who have been latest in reaching Lexington, *have come by water*. And when examined and understood, the nature of the case shows that *it must be so.*

"It has been industriously attempted to palm on the country another belief, which it may be proper to notice. The public are gravely told, that Louisville and Cincinnati are preferable to Lexington, as seats for schools of medicine, *because they have hospitals*, in the wards of which a class can be profitably instructed, by an attendance on clinical practice. When we take into view the ground on which this representation is made, and the purpose intended to be subserved by it, we have no hesitation in pronouncing it an error in itself, and a palpable delusion practised on those who are unacquainted with the subject.

"That a *small resident* class may be benefitted by this form of instruction, is true. But that a *large winter class*, assembled to attend lectures for *only four months* can, *is not true*. Nor do we hesitate to add, that those who assert the contrary of this, do it from *ignorance*, or a *wish to deceive*. On this point we speak from *experience*. We have ourselves made one of a large class, that attempted this scheme of instruction, in the wards of the Pennsylvania hospital, which are much more spacious, and better fitted for the purpose, than those of the Louisville and Cincinnati hospitals. And what was the issue? Nothing but this. We *abandoned the matter*, in the *second or third week*, as a mere annoyance, and *a waste of time;* and so did every other pupil of stand-

ing in the class. When the prescribing physician was walking his rounds, followed by a train of a hundred students, or more, the sick rooms were converted into so many Babels. All was confusion and indistinct sound. Every young man pressing and scuffling to see and hear something useful, often to the serious annoyance and injury of the sick, precluding the possibility of learning any thing, and converted the entire scene into a farce. And such will be always the case, under such circumstances. Add to this, that young men, attending six or seven lectures every day, have no time to spend in the wards of hospitals. Nor, if they had, will they find there the sort of cases, which they will be called on to treat in private practice. In fact, in whatever light it may be viewed, hospital practice, held out, as a lure to attract a large winter class, is a dishonorable hoax, to gratify the cupidity of those who practise it."

"Once more. We are confidently told, that large cities are necessarily the best seats for schools of medicine, because they afford the greatest facilities for improvement in anatomy—in other and plainer terms, because subjects for dissection can be procured in them most readily, and in the greatest number.

"This assertion is unfounded, and betrays, in those who make it, an entire ignorance of the past history, and actual condition of medical schools, not only abroad, but in our own country. London is the largest city in Europe, containing a million and a half of inhabitants. Yet, to procure a subject for dissection there, is uncommonly difficult and expensive, and often exceedingly dangerous. Hence the atrocious practice of assassinating individuals, and selling their bodies to surgeons and pupils. Edingburgh contains a population of more than a hundred thousand. Yet so difficult is it to procure subjects there, that the Professor of anatomy *imports them from Paris*. And, for a large portion of his demonstrations, during his lectures, he has sometimes had but *a single body*. Here again the want of anatomical facilities *has led to assassination*. In what *small town* has this ever been the case? *In none*. Of the procurement of subjects in Dublin, we are not so fully informed. We know, however, that it is difficult and expensive."

"It is not true then, that cities afford pupils opportunities for improvement in anatomy, in proportion to their size. The advantages they offer, in this respect, depend chiefly on the liberality of the sentiments and usages that prevail in them. Provided the arrangements of the school are judicious, and the disposition of the inhabitants friendly, experience proves, that, in towns of a moderate size, subjects amply sufficient for the purposes of demonstration, can be readily procured. We could name a place, containtng not more than *three thousand* inhabitants, where facilities of the kind were abundant."

"But we are not yet done with this subject. Serious reasons

can be rendered, why, as a place of instruction for youth. a large city is inferior to a small one.

"1. Subsistence in it is much more expensive. Pupils can live in Lexington at *half the cost* of similar fare and accommodations, in any of the large Atlantic cities—and we believe at *considerably less*. The same is true, in no small degree, as relates to Louisville and Cincinnati, or any other very active seat of commerce that can be named. The rates of living in them are at least *fifty per cent. higher* than in Lexington. To young men of limited means, this is a consideration of no small weight.

"2. The shows and amusements of large cities occasion much waste of time and money. This is true especially as relates to youth, fresh from the country, new to the world, and, for the first time, removed from the guidance and care of their parents and guardians. From this cause, not only is the present time which should be devoted to study mis-spent by them; but habits of idleness and dissipation are contracted, which often last for life and produce ruin.

"It is not long since a gentleman, who had himself tried it, assured us, that he had found it *impossible to be a student in Louisville*. Nor did he hesitate to assert his belief, that it would be difficult, if not impracticable, to find a young man, who could *study closely there*. One of the Professors of the medical school of New York gave us similar information, last summer, with regard to that city. He frankly acknowledged, that the numerous scenes of seduction and dissipation, and the general distracting character of the place, were eminently injurious to the youth who resorted to it, for their education. While an emporium of commerce and trade is the best place, in which to *practice* a profession, we apprehend it is, for the mass of young men, *among the worst*, in which to acquire a knowledge of it.

"3. The incentives to vice of all sorts, are more numerous and powerful in large cities, than in small ones. This is more especially the case in places that are constantly crowed with strangers, or which constitute thoroughfares for travellers of every description. We need scarcely add, that the two latter conditions are peculiarly true of Louisville and Cincinnati. Those cities have usually a heavy stranger-population throughout the year; and, during the winter and spring, they are, by far, the greatest travelling thoroughfares in the Mississippi Valley. These things are favorable to those places, as emporiums of commerce, and contribute much to their growth and prosperity, in that respect. But we have yet to be convinced that they are not prejudicial to them as situations for medical schools. To these comparisons between Louisville, Cincionati, and Lexington, we have adverted with no little reluctance and regret. Nor would we have done it at all, had it not been, that they have been, for years, reiterated in conversation and letters, and indelicately bandied in pamphlets and

newspapers. The public will bear us witness, therefore, that we have not been the aggressors. Neither, however, have we felt at liberty to remain any longer silent, under such misrepresentations, intended to injure the school of Transylvania."

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*Obstetrical Reports.*—In the reports of Dr. Reid, in the London Medical Gazette, several interesting tables are inserted, from which we extract the following:

| Of 5691 Cases:— | | | |
|---|---|---|---|
| The Vertex presented | in 5443 | | |
| Nates, or lower extremities, | in 162 | or 1 in | 35 |
| Shoulder or arm, | in 29 | — | 196 |
| Face, | in 25 | — | 228 |
| Funis, | in 31 | — | 183 |
| Abdomen, | in 1 | — | 5691 |
| Convulsions occurred, | in 11 | — | 517 |
| Retroversion of Uterus, | in 2 | — | 2845 |
| Rupture of Uterus, | in 2 | — | 2845 |
| Placental presentation, | in 8 | — | 711 |
| Accidental flooding before separation of the placenta, | in 32 | — | 178 |
| Flooding after, | in 40 | — | 142 |
| The placenta required manual extraction, | in 58 | — | 98 |
| Patients delivered by forceps, | in 31 | — | 183 |
| " " Craniotomy, | in 22 | — | 259 |
| " " Version, | in 28 | — | 203 |

Of 1795 infants, 886 were males, 909 females. Twenty-four were twin cases.

Ages of 1771 mothers.

| | |
|---|---|
| Under 20 | 69 |
| Between 20 and 25 | 622 |
| 25 and 30 | 478 |
| 30 and 35 | 368 |
| 35 and 40 | 174 |
| 40 and 45 | 54 |
| 45 and 50 | 6 |

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*The Frequency of Cancer in the two Sexes.*—The following interesting conclusions and tables, from the pen of T. Wilkinson King, Esq., have been recently published in the *London Medical Gazette.*

Mr. King is Curator of the Pathological Museum of Guy's Hospital, and as it is his duty to conduct all the post-mortem inspection at that extensive institution, his opportunities have been most ample. And we can assure our readers, from an intimate

personal acquaintance with the author, that every reliance may be reposed in his statements.

| In Females. | | | | In Males. | |
|---|---|---|---|---|---|
| Between 1 year and | 9, | none in | 27 | none in | 40 |
| 9 | 11, | —— | 19 | —— | 27 |
| 12 | 14, | —— | 12 | —— | 9 |
| 14 | 18, | 1 | 26 | 3 | 34 |
| 18 | 24, | 5 | 62 | 2¼ | 64 |
| 24 | 30, | 7 | 68 | 2 | 84 |
| 30 | 40, | 24 | 87 | 5 | 108 |
| 40 | 45, | 13 | 30 | 5 | 40 |
| 45 | 50, | 16 | 51 | 13 | 98 |
| 50 | 55, | 7 | 24 | 4 | 32 |
| 55 | 65, | 11 | 36 | 4 | 48 |
| 65 | —, | 1 | 9 | 3 | 14 |

This table exhibits the following results: In females, cancer gradually increases from youth up to the 45th year; and of all who die at about the 45th year, *one half* have cancer. From the 45th to the 65th year, it regularly decreases, until the proportion is found to be 1 in 9. In males, the results are different; from the 40th to the 45th year, but 1 in 8 are found to have cancer; from 24 to 30, 1 in 42; from 50 to 55, 1 in 8; 55 to 65, 1 in 12, and from 65 upwards, 1 in 5. These results give a total of 1-5 for females, and 1-14 for males.

These results are important; but whether they will be found applicable to our country, remains for statistics to prove.

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The following remarks, extracted from the Buffalo Medical Journal, are so just and appropriate, that we desire to lay them before our readers. The correctness of the opinions expressed in the article alluded to, especially on the subject of the *credit system*, cannot for a moment be doubted. There are particular cases, it is true, in which the crediting system has drawn forth talents of the highest order, but their are one hundred to one in which nothing of the kind has resulted; and while its prolific influence is overflowing the profession with half-made *doctors*, even those who are the recipients of this favor, find, ultimately, that it was a poor boon, scarcely worth the labor of giving and receiving.

Much is said about *elevating* the profession, and the means necessary to accomplish so desirable an object; some point to medical schools, and some to private teachers, as the faithless sentinels who allow an enemy to pass. Occasionally we find

both at fault; but neither one exclusively censurable. Private tutors should be more circumspect in selecting pupils, who by habits, education, and natural abilities, shall evince a reasonable hope for the future; and medical schools should be rigidly just, and allow no man to receive a degree, which is a passport to the confidence of the public, unless he exhibit all the qualifications requisite to constitute an enlightened physician.

While, however, tutors receive all who offer themselves, *indiscriminately;* and schools, for the purpose of swelling their annual catalogues, by which they overwhelm the community with the force of numbers, receive all who offer, without money and almost without price, and graduate all candidates whether qualified or not, for the sake of gaining their paltry influence; in vain may we mourn over a degraded profession, and in vain may we seek a remedy, for what all admit to be a lamentable defect.

"*Medical Schools.*—The season is now at hand when the medical student is to decide at what institution he will seek instruction for the coming winter. As it is customary for Medical Institutions to advertise their advantages, terms, &c., through medical and other journals, and by means of circulars which are extensively distributed, students are enabled readily to obtain what general information they require, before determining to which to give their preference. As regards the relative merits of different schools, we have not data sufficient to qualify us to speak; nor have we any disposition to make invidious distinctions in order to influence the minds of those students and preceptors who may do us the honor to read our remarks. We accord to all the merit of being honestly desirous of fulfilling their obligations to the pupil and the profession, and we sincerely believe that the majority of those who are invested with the responsibilities of teaching the various departments of medical science, are competent to the duties involved. That there are evils and abuses in some of our medical schools which require correction, all who have bestowed any observation and reflections on the subject, must admit. Of these, in our capacity of journalists, we shall not hesitate to speak as occasions offer, without intending, at any time, to apply our remarks to any particular institution.

"Medical schools have increased in number, of late years, so that there can hardly be said, at the present time, to be any deficiency. We do not, however, regard the fact that they are numerous, as necessarily leading to bad consequences. So far as an honorable spirit of emulation is developed and promoted by competition, it may be expected that the means of education will improve, rather than diminish, in proportion to the number of schools. But if, instead of this commendable spirit, they vie

with each other in offering to the pupil unworthy inducements, and in resorting to intriguing, dishonorable methods to increase the number of their students, their influence upon medical education and the profession, is of the most pernicious character. If it be tacitly understood, for example, that, at certain schools, the acquirements of the pupil are but slightly scrutinized in admitting him to graduation, the public, the profession, and the pupil himself, alike, receive a severe injury, in so far as this consideration exerts its intended influence. It is needless to say that this course is reprehensible in the extreme. So, also, deception in any form, underbidding in price, and any of the various methods of electioneering and puffing, obviously tend to degrade the profession, and institutions known to adopt such means of advancing their interests, should be scouted by all who have the honor and usefulness of the profession at heart. We trust and believe that it would not be an easy matter to cite many, if any instances, in which these enormities are practised. There is, however, one custom more or less prevalent, which, although we would not include it in the same category, in a moral point of view, is (as it seems to us) hardly less injurious in its consequences. We allude to the custom of receiving students at medical schools upon credit. Many of our schools offer this inducement, to a greater or less extent. This custom, in various ways, exerts a detrimental influence. It does injustice to the teacher, since it is not to be supposed that he can afford to bestow his time and labor in this, more than in other departments of effort, without an adequate compensation; and hence, it follows as a legitmate result, that institutions who adopt this custom are unable to command the same ability in their teachers as those who pursue a different system. All the facilities of instruction, also, dependant on the pecuniary resources of the institution (and the fees from pupils generally constitute the chief resources of medical schools,) will be impaired by a system, the effect of which is, that a large portion of the class receive instruction gratuitously. No institution can pursue this course and do proper justice to its pupils, and to the cause of medical education. It involves a practical discrimination which is an imposition upon those who do not ask for credit, and, in reality, obliges them to support the school for the benefit of those who contribute nothing towards it.

"Its tendency is to cheapen the value of a medical education in public estimation, since it is an universal habit to estimate the real worth of anything by what it costs. But, more than all, it exerts a direct influence to lower the standard of medical attainment, and depreciate the honor and usefulness of the profession, by operating like a bounty for young men to engage in the study of medicine who are in no wise qualified, either by preliminary education, habits of application, or elevated

views. It is due to this evil, in a great measure, that so many enter the profession, whose connection with it results in disappointment and mortification to themselves, and is a reproach to the profession,

"If, then, we were to advise the medical student, about to attend lectures, we should say, go prepared to pay the fees required, and give preference to an institution where this is expected of all. Let physicians, generally, give this advice to their pupils, and the evil of which we have spoken will be speedily corrected.

"There are other matters connected with the subject of medical schools upon which we have some remarks to offer; but these we must defer for a future number. The subject is one of great importance, and we mean to discuss it freely and independently.

"In the preceding remarks, we have considered *credit* as equivalent to a gratuitous attendence upon lectures. That it is so, is, of course, not true, in a rigid sense, since a proportion of those who obtain credit ultimately fulfil their obligations to pay. If, however, we have been correctly informed by those acquainted with the practical working of the system, this proportion is not large. For those who are able to give satisfactory security for payment, the system is quite superfluous, since these persons ought to be able to obtain the facilities they require, from the circle of their immediate friends, or from those whose business is to lend money upon satisfactory security. They ought not to ask their teachers to sustain toward them the additional relation of bankers, nor would they, if the system did not exist. But, being customary, they conclude they may as well avail themselves of it. Institutions, hence, deprive themselves of much of the immediate avails of teaching which they might otherwise have, and in this way inflict upon themselves a pecuniary injury. We would sympathise, as fully as any, with the pupil earnestly desirous of entering the profession, but repelled by impoverished means; yet, regarding the condition of the profession as effected by removing this obstacle in all cases, it would be far better for the pupil himself to submit to the necessary exertion, deprivations, and delay, than for the present state of things to continue, although it may seem to contribute to his immediate advantage."

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*The Buffalo Medical and Surgical Journal.*—Since our return, we find regularly upon our table the above named journal, which is a well filled periodical, published at Buffalo, N. Y., in monthly numbers of twenty-four pages, edited by Austin Flint, M. D. The Editor evinces industry and talent, and we trust he may be able to enlist the patronage of the profession sufficiently to sustain his meritorious journal.

INTRODUCTORY LECTURE.—*The Reciprocal Obligations of Professors and Pupils.*—An Introductory Lecture, delivered by THOMAS D. MITCHELL, M. D., Professor of Materia Medica and Therapeutics, and Lecturer on Obstetrics, in Transylvania University.

Professor MITCHELL discourses with his usual ability on the reciprocal obligations of professors and pupils, and we are sure that neither class can read his remarks without being profited. Our limits will not admit of extensive extracts, but a few will exhibit some of the author's views on the subject before him. Of Professor's qualifications he thus speaks:

"It would seem, that a strictly conscientious man would not accept an appointment, for which he has neither natural, nor artificial qualifications; unless, as it may happen, his vision of himself be so obscured by overweening vanity, as to induce in him a totally false estimate of his powers. And, even though a man possess some kind of qualifications, it will not follow that he is therefore suited to the post. An individual may be eloquent, he may possess a pretty ample fund of general information, he may even talk fluently, and still it may not follow that he is, after all, just the right kind of a man to fill a professional chair. It is not enough that he was once a student; that he has actually read a good many books, and can talk with volubility about others he never read. In our profession, and especially in the business of teaching, an old capital will not suffice. That, to be sure, is valuable; and yet, it is only available, as it is burnished and augmented and fortified by daily additions to the stock. The true, legitimate character of study, as respects the professor, is like that of the perennial plant, which, although more beauteous to the eye at one season than at another, survives alike the withering heat of summer, and braves the rigor of the wintry blast. In the language of a celebrated father in medicine, the physician, and much more the teacher, should be a student as long as he lives."

"As the term allotted to a course of lectures is too brief to permit an extended view of any subject, justice demands of the Professor, to direct the attention of his pupils to such points as are best suited to qualify for professional usefulness. It is well known, that few Professors succeed in a complete presentation of their full course of lectures, in one session. They intend to do so, but they often fail. Contingencies, sometimes unavoidable, operates to disappoint reasonable expectation, and the desired end is not fully attained. But when a Professor, from undue partiality for some special topic, not at all dissociated with his course, dwells on it at unreasonable length, he necessarily does injustice to other themes, and some of these, it may be, are of great practical importance.

"The Professor should not be over anxious to make a display of his various reading, during his course of lectures, further than reference to authorities may be needful to fortify his positions. It is much more within the scope of his duty, to give his pupils correct views of all the subjects he thinks it important to teach; and these should be deduced from copious reading and abundant study; and he can do all this without manifesting undue anxiety, to be thought a kind of walking library.

"To be successful as a teacher of medicine, it is absolutely indispensable that words and phraseology be so employed, that no sane man can fail to understand the speaker. And that the ends of teaching may be fully realized, two qualities at least, must be joined in every professor, who would be successful and satisfactory. In the first place; he must understand the subject himself; and in the second place, he must be able, so to teach, that his hearers may understand it, if they will. A man may be as wise as Solomon, and if you please, ten times wiser than he, and he may have no aptness to teach. Have we not all witnessed cases in illustration? One of the most learned professor in America, a man whose reading and research far outstripped that of all his colleagues, was, beyond controversy, the worst teacher I ever heard, or ever expect to hear. His efforts in the task of instruction, were laborious and faithful; but succeeded only, in making confusion worse confounded."

The following sentiments we are gratified to say, are known to be strictly true:

"I rejoice to say, that in no city in America, are students of medicine more kindly received than in Lexington. I do not except even my native place, the city of brotherly love, as it is called, in this regard. Medical pupils who conduct themselves with propriety, (and I fondly hope there is not a gentleman before me who will do otherwise,) will have no difficulty in realizing, that they are in the midst of a people who understand the proprieties of social life, and the kind bearing that should be extended to strangers. Lexington is too proud of her medical school, and of her other institutions of learning, to withhold from any honorable pupil, the respect and attention to which his deportment entitles him. The really intelligent and truly respectable of our community, without an exception, are deeply sensible of the high value of these her jewels, to treat with indifference or contempt, any who come hither to share their rich treasures."

The following sentiments breathe a spirit to which no honorable mind can find objections:

"And when I speak of the professor having his mind fixed on the elevation of his *own* school, do not for a moment misunderstand me, as affirming or insinuating. that he is at liberty to

commence and carry on a deliberate system of opposition to every other, or to any other school, or that he has a right to defraud another establishment for the aggrandisement of his own. He may not raise his voice against an honorable, noble competitor. If he be a man of truth and integrity, he will not. The cause of science everywhere and at all times, is the cause of humanity, and he who possesses the right spirit, will rejoice in its steady progress. But at the same time, and with all this frank concession, it is perfectly consistent to strive for excellence, to raise our standard high and to seek the greatest attainments in a good cause. The professor may therefore, while extending all possible courtesy to sister associations of honorable bearing, press his whole energies that are pledged to science, to elevate his own school to the loftiest point of excellence. Away with that mean and grovelling spirit, that prompts some who are invested with the professorial office, to insinuate and falsify in such a way as to inflict a wound on the character of an institution of higher order and nobler bearing than their own. The man who can stoop to such things for the sake of a little paltry pelf, is unworthy a place in any institution of learning; and if Transylvania cannot be sustained, save by the use of weapons that truth and justice alike repudiate, let her go down, and her name be blotted from the earth. The flag under which we sail spreads out to the view of the world the glorious motto, *virtue, honor, and independence.* That flag is nailed to the highest pinnacle of the topmast. It is identified with our existence as a school, and we neither ask for, nor expect success on any other basis."

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*Harrison's Elements of Materia Medica and Therapeutics.*—The *second* volume, completing Prof. Harrison's System of Materia Medica, has just been issued, and it is but just to say, that it fully sustains the high reputation of its author. We would strongly commend it, both to pupils and practitioners, as a work eminently calculated to enlarge the views and embue them with sound philosophy. The author's views on the modus operandi of medicines have been extensively criticised, and, perhaps, he is too exclusive on this subject; but these are points of minor importance, compared with therapeutical information, with which the work abounds.

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*The New York Medical and Surgical Reporter.*—We have received several numbers, in exchange, of the above journal. It is published in the city of New York, once a fortnight, edited by Clarkson T. Collins, M. D. The avowed object of this journal is to report clinical lectures and cases. The object is a laudable one and deserves patronage; its pages are already filled with useful matter, a specimen of which we gave in our last number.

# THE WESTERN LANCET.

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## SURGERY.

ART. 1.—*Lithotomy and Lithotrity.* By J. M. BUSH, M. D., Professor of Anatomy in the Medical Department of Transylvania University.

Since the publication of an article in the Transylvania Journal of Medicine, on the operation of Lithotomy, illustrating the unparalleled success of Prof. DUDLEY; I have enjoyed a continuance of the advantages for observation in the medical and operative practice of the same distinguished gentleman. Having been his assistant upon the occasion of thirty-two additional operations, which extends his whole number at this period to *one hundred and eighty-five;* and the number which has afforded me observations, as his assistant, fifty; besides having made myself two operations of Lithotomy, and one of Lithotrity, I am again disposed to offer a few additional thoughts upon this interesting topic.

The paper referred to above, has been noticed in a book on Urinary diseases, and their treatment, by ROBERT WILLIS, M. D., published in London in 1838. The author, speaking of the operations of Lithotomy and Lithotrity, page 345, makes the following remarks:

"The latter operation, from which so much was anticipated at first, and which was so flattering to the timid, would not seem hitherto to have answered expectations. Whether it be that cases have been too indiscriminately submitted to treatment by its means, that the operation has been held applicable in too wide a range of circumstances, that its dangers are actually greater than they appear to be, or that it has hitherto been too much in the hands of men who were not physiologists and pathologists,

besides being handicrafts men; it is quite certain that lithotrity, or lithotripsy, has on the whole proved even more fatal, on the average, than the old operation of lithotomy used to do. And I think no practitioner of lithotrity or lithotripsy can boast of his thirty, forty, fifty, nay, of his hundred cases operated on in succession, without an intervening accident. Frére Jacques cut thirty-eight successively without loosing a patient. Cheselden in fifty-two cases, operated fifty times with success. And Professor Dudley, of Lexington, in Transylvania, United States, according to the statements published by Dr. Bush, would appear not only to have done the operation more frequently than any man of his time, but to have done it with a success altogether unprecedented; of one hundred and fifty-three cases operated on by Dr. Dudley, one hundred and forty-nine are reported to have done well; only four died; this is not even half of the very small mortality in the practice of Cheselden. Dr. Dudley ought however to be very successful; he is extremely cautious in his choice of cases, and never even passes a sound to ascertain whether there be actually a stone in the bladder or not, until every symptom of constitutional disturbance is allayed by general treatment. Dr. Dudley's practice is so excellent in this respect, that I extract the account of it published by Dr. J. M. Bush in an American Journal, to which I cannot more particularly allude, in as much as I only possess that part of the volume which embraces Dr. Bush's communication."

He then introduces an extract from my paper to illustrate the preparatory treatment of Prof. Dudley previous to sounding, and the final operation. It is necessary here to correct the impression which Dr. Willis appears to have received from the perusal of my paper, viz: that Prof. Dudley is "extremely cautious in his choice of cases." For the profession to understand the literal meaning of the language above, would be not only to do injustice to Prof. Dudley, but might have a tendency to jeopardize those who are afflicted with this most painful malady.

The American Lithotomist has had presented to him 188 subjects, 185 of whom have been operated upon; two did not obtain the use of his knife, because both, when reaching Lexington, had already felt the wearing out influences of large calculi to such a degree, that they survived but a few days. One at the time was undergoing preparation for the operation. Here, then, is a large number of calculous patients, of all ages, and both sexes, coming to Prof. Dudley from every quarter of the widely extended range of the Mississippi valley; and I have seen patients who

were in this list, the subjects of such intense agony, with purulent and sanguineous discharges from the bladder, indicating, without any reasonable doubt, the extensively ulcerated state of that organ, so far relieved by the medical treatment, with a view to the operation, that they were almost willing to return home without this unconditional and final remedy.

These facts render it necessary to correct this impression of Dr. Willis, that Prof. Dudley is *remarkably select* in his cases for the knife; and it is important for the profession to understand, that his success depends chiefly upon the principle,—which he more extensively recognizes than any surgeon living or dead, with whose history I have have an acquaintance,—of the *thorough preparation of the general system preparatory to the operation;* an account of which is detailed in my former paper on Lithotomy.

It is not, then, that he selects the favorable cases from among the unpromising, and thus secures his extraordinary success; but he receives *all*, and according to the necessities of individual cases, they receive his services as physician previous to his operative treatment as surgeon. In these principles, are based his unprecedented triumphs in all his operative surgery; and, recognizing the same rules, every surgeon might promise the same success to that afflicted class of patients, who are the subjects of stone in the bladder.

After the extract previously alluded to, Dr. Willis continues:

"All this is excellent, and every way worthy of imitation by surgeons in general. If Cheselden cut twenty-six patients in London, as they presented themselves to him, and without weeks, far less months of medical and dietetic preparatory treatment, he would certainly have cut fifty in the country, with as little fastidiousness in the choice of his subjects, and particular pains to prepare them for the operation."

Here, again, this idea of *selection* of cases is held out, from which selected number, the surgeon is to secure his success by previous preparatory management. In five hundred cases, indiscriminately collected, there cannot be a question in my mind, but that ninety-nine hundreths of all who might receive the benefits of proper preparatory treatment, would recover.

"Nevertheless," says Dr. Willis, "the average mortality from lithotomy in all hands, appears to be about one in eight; and when it is considered that children of all ages, among whom the

operation is almost always fortunate in its issue, are included in this reckoning, it is evident among grown men the operation is very formidable, and very fatal. Lithotrity cannot boast of any thing even like this very moderate general success. There have, as yet, been no Frére Jaques, and Cheseldens, and Martineaus, and Listons, and Dudleys among lithotritists. The deaths in the hands of the leading lithotritist of Europe, M. Civiale, are reported to be *at least* in the proportion of one in four. In all hands, the mortality from lithotrity, has been that of pestilence, something like one in two."

"But surgeons, who are at the same time anatomists and physiologists, are now including the operation of lithotrity within the limits of their profession, and will undoubtedly, by and by, learn to appreciate the cases and circumstances in which it may be most advantageously employed, and thus make it a means of sparing pain to some, at least, of the unfortunate sufferers under calculus."

A few remarks are here made in reference to the author's views, treated of in the commencement of the former chapter, on the subject of the solution of vesical calculi, either complete, or reduced to a size so small as to pass the urethra with facility, and then concludes with the following sentence: "And thus the suffering, and risk to life inseparable from a most painful, and, on the average, still fatal operation be avoided."

If such are the opinions of Dr. Willis, whose theatre for observation is the metropolis of the world, with its extensive and completely arranged hospitals, under the practice of the most distinguished and successful European surgeons, he is certainly justified in the use of the strong language, with which he speaks, of the mortality of lithotomy, and the more alarming results of lithotrity, or lithotripsy. If the general success of the former operation, in all hands, at this boasted day of enlightened and advanced surgery, is seven in eight; and of the latter, pestilence like, even in the hands of that modern father and master, Civiale, three in four; and yet, in the practice of Prof. Dudley, one hundred and eighty, in one hundred and eighty-five, have been successful, there must exist some more than ordinary circumstance, to afford a satisfactory explanation of this vast difference and altogether unprecedented success. Sir Astley Cooper, Martineau, Liston, Lisfranc, Velpeau, and Dudley, all divide the same parts in opening the bladder, whether the knife, bistouri caché, or gorget, be the instruments selected, all operating proba-

bly with equal dexterity and skill. The reasons, therefore, for the difference, cannot be found in the mode of doing the operation. Children, adults, and old subjects, no doubt, have all equally formed the classes of subjects submitted to the different operators; and hence, the classes of patients do not explain the remarkable disparity.

It is conceded by all surgeons, that children are the most fortunate of all subjects in the successful issue of lithotomy; and in my humble opinion, there is a satisfactory reason for this result. Although in the practice which has been the principle field of my observations, the proportion of children bears but a comparatively small ratio to the number of adults; yet, I am prepared to state, that children are, to make the rule general, much more free of those causes to be found in the state of the general system, that tend more or less in all calculous cases, to hazard the life of the subject, if he submit to the operation previous to the removal of such causes. Why is this the case in the child, as a rule that I am prepared to recognize as general, the brevity of this paper will not allow to be discussed. Certainly Professor Dudley's success, like that of all masters in surgery, has been greater among children, than the other two classes of adults and old men, never having lost a single child, or youth, upon whom he has made the operation; the very limited number failing to enjoy a successful issue, being from the latter classes of subjects.

The only two patients, whom I have cut, one an old gentleman, seventy-two years of age, the other a boy of only ten, recovered with equal facility, considering the reactive energies appropriate to the different periods of life. In the latter case, I had scarcely any duty to perform, as my patient's physician, in the way of medical or dietetic treatment; the evidences of a favorable condition of the general system, were so manifest and unequivocal, in the healthy appearances of the tongue, skin and abdominal secretions. In the other, something more was required; although this patient had lived over his three score and ten, observing during this long life, more than ordinary prudence, in all his habits, and was thus rendered a more suitable subject for a successful operation, than another of the same age but of opposite habits. I cannot entertain a reasonable question, however, that he would most likely not have recovered, had the means

intended to correct some disordered functions been withheld. The continued presence of a stone in the bladder must, more or less, invade the sound condition of that organ, under almost all circumstances; and as we are, at all times, liable to derangements of the digestive apparatus, either acute or chronic, those who suffer such affections during the presence of stone, will not to a demonstrated certainty, escape the influences of the general law, that the weaker parts, are more apt to contract local disorders, originating in constitutional causes.

Calculous patients have, in too many instances for the safety of human life and the glory of operative surgery, a general cause of a fatal tendency, aggravating the effects of operations and the local disease. I say a fatal cause, because I do not hesitate to venture the opinion, that a deranged state of those organs, composing that abdominal group called the chylopoietic, and their assistants, are the causes of the frightful mortality of lithotomy, where the operation is made by the hands of a skillful surgeon.

The influence of the state of the general system in the production of local diseases; and the treatment of local disorders, by constitutional remedies, so well understood by Abernethy, and taught in his public lectures and writings, a half century ago, as a principle does not appear to have been acknowledged and extended into the surgical department of the profession, so generally as its high claims to rational philosophy seem to me to merit. If local diseases, depending upon constitutional causes, are not to be overcome by local treatment; if cancer, and all those terrific maladies kindred to it in malignancy, are in most instances only to be aggravated by the interference of the knife, which too often invites their concentration to some more vital part; why is not the law, which grows out of the preceding facts, more universally recognized by the surgeon, and made subservient to the success of his art. A patient with stone in the bladder may be sounded, and the exploration detect no very striking evidences of a morbid condition of the organ, while his urine may evince a sound state of the kindeys; all the urinary apparatus appearing very favorable to a speedy operation; but if the digestive apparatus should be performing its functions in a manner not subserving the healthy purposes of the economy,

and he be cut under such circumstances, the issue, to say no more, will most likely be very doubtful. The shock, to the nervous system, of an operation so extensive, will very speedily excite such a commotion, as to endanger by its reaction upon an organ, thus prostrated, a state of inflammation, most probably, to terminate in the loss of the case. On the other hand, the calculous subject, who, in addition to the disordered condition of his chylopoietic viscera, has felt these constitutional causes aggravating his local complaint, in the shape of hæmorrhages, mucous and purulent discharges, together with extensive ulcerations of the vesical tunics, will be rendered far more hazardous, in submitting without preparatory means, to the operation.

That these preparatory means, with a view of rendering the abdominal organs healthy in their functions, will also exercise a healthy influence upon the state of the bladder, is a law as true as that local disorder is a consequence of general causes. The unprecedented success of lithotomy in Lexington, is alone to be ascribed to the very extended recognition of the principle I have so briefly, and too feebly, attempted to explain; and when its influence, and paramount importance shall be universally admitted and practiced, lithotomy will loose most of its dreaded features, and human life will be rendered as safe in the operation of lithotomy, as it is now in hydrocele.

What reasons are to be offered by the advocates of lithotrity, why this comparatively bloodless operation, with obtuse instruments, is far less successful than the former? Is it because its class of patients are the refuse of the lithotomist? or is a better reason to be found in the circumstance, that the lithotritist considers his patient always prepared for his more simple operation, and denies him even the advantage of *one or two days purgation*, with a corresponding regimen, but takes his sittings without any delay, for these slight measures to be executed? Civiale, Leroy and Amussat, cannot be excelled in instrumental manipulation. I have never witnessed any thing like the skillful beauty, care, and dexterity, with which Civiale commands his lithotrite; nor, indeed, are Leroy and Amussat much his inferiors. All of these gentlemen are masters in the operation.

That lithotrity is now established will not admit of a doubt; the reputation these gentlemen have acquired in the capital of

France, from a practice drawn from all Europe, is conclusive. It cannot, however, supercede lithotomy; most probably it will never be considered *the* operation, as a general rule; but that it will continue to rise in its estimation by surgeons, and ultimately become far more successful than it now claims, cannot be doubted. In all those cases which are adapted to its practice, it may become as successful as I now believe lithotomy to be; and that success must depend upon the adoption of the principles to be exercised in the preparatory treatment of patients.

The case of the single patient upon whom I have successfully performed lithotrity, will conclude my paper.

Mr. H——, aged about 25 years, of rather an excitable constitution, came to Lexington from the State of Alabama, for the professional services of Professor Dudley. After a few days preparation, he was sounded, and a large firm calculous discovered. The idea of being cut, was always repulsive to his feelings, and as the state of his general system was approaching the period when he could be safely placed upon the table; he gave some intimations that he should like an effort to be made at lithotrity. Accordingly, he was placed in my hands for the essay. Being well prepared for the knife, I began the operations of lithotrity, by filling the bladder with tepid water, thrown in by the urethra, from a pump syringe, to an amount adapted to the condition of the organ. The second size lithotrite was introduced, (M. Charrière's modification of Heurteloup's,) and the stone caught several times, receiving the influence of the instrument, which was then withdrawn. The patient immediately evacuated the fluid contents of the bladder, and some dozen fragments of the external lamina of the calculus. He was requested to remain quiet in his room, until next day, and to use copiously of slippery-elm mucilage, in the meantime. Having suffered no inconvenience from this first sitting, the following day the same process was repeated; and so I continued, for three or four successive days, during which time, the whole of the external lamina was removed, being about a half line in thickness; the calculus measuring on the scale of the instrument, one inch and a quarter, and one inch in its long and short diameters. This much being accomplished with facility, the remaining mass resisted the crushing effects of the largest size

instrument, for several sittings in succession. Under the impression, after what appeared a reasonable effort, that the stone was of a material too hard for the power of the instrument, it was presumed that Professor Dudley would cut, so soon as he recovered from a disabled shoulder, (an accident occuring to him during my operations.) Persevering, however, with the lithotrite, about the eighth introduction, with the assistance of my partner, Dr. E. L. Dudley, the mass was broken, and the operation completed at the twelfth sitting. During the whole time, it was never necessary to allow more than one day to intervene between the various operations, so favorable was the condition of the general system. Large quantities of pure tepid water were always used before and after the operation; always throwing in the fluid very gently and gradually, and imposing a quantity upon the bladder, equal to its utmost capacity. I prefered making the urethra conduct the water into the organ, instead of the catheter, which is usually employed, for the reason, that I dispensed with its pain, and disturbing influences upon the bladder; and the dilating advantages I thus secured upon the urethra itself, facilitating the passage of the fragments.

The patient collected and preserved, the whole amount of the stone, thus removed; and upon a minute inspection of the whole, it was clearly demonstrated, that this stone was composed of a nucleus, and but two lamina. The nucleus came off entire, about the size of an English pea, and the second layer, which gave so much solidity, and resisting firmness to the mass, was discharged in numerous fragments, the largest of which weighed seven grains, and measured three-eighths of an inch long, and five-sixteenths wide.

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ART. 2.—*On the Use of Warm Water and the Bandage in the Treatment of Fractures and other Injuries.* By JOHN T. LEWIS, M. D., of Lexington, Ky.

G. S. had his foot crushed by the wheel of a heavy passenger car, in attempting to get on a train of cars under way. A medical gentlemen, who was present, applied such dressing as could be

obtained; and he was brought to town in a short time after the accident occured.

The appearance of the shoe, which was on the foot at the time the injury was sustained, together with representations made of its character and extent, by those who witnessed the occurence, induced me to defer a minute examination until the following morning, intending to avail myself of Professor Dudley's skill and experience, before any decisive course of treatment was adopted. He was accordingly invited to visit the young man, and after such an examination as the mangled condition of the foot would bear, remarked, that "it was worth an effort to save it." I was more disposed to concur with him, from an apprehension that amputation would fail, than from any well grounded hope that the course advised, would be successful. From the toes to the instep, was a gaping wound, the foot having bursted from pressure. To what extent the bones were injured, it was not possible to learn with certainty, but there was every reason to suppose, that most, if not all the metatarsal bones were fractured—some, perhaps, crushed in many pieces. The weather was excessively hot, (July,) and the young man had been indisposed and feverish, for some days. A more unpromising prospect could not well be presented.

A bandage was applied from the toes to the knee, so as to afford a comfortable support to the part, lessen the force of the arterial circulation, and prevent muscular contraction. The dressings were ordered to be kept wet with warm whiskey and water, and a brisk mercurial cathartic administered. Every effort was made to prolong the intervals between dressings but without avail. The little toe came away in the dressings on the third day; the pain was increased rather than diminished, and, with all, our nurses were exhausted by watching, and the labor of pouring water &c, on the foot, which alone, gave any relief. Well marked red lines were seen running from the foot to the knee, and the surface of the injured part extensively vesicated, indicating, but too plainly, that mortification must soon, if not arrested, destroy the patient.

Hot whiskey, with a weak ley, was substituted for the water and whiskey, and the following labor saving expedient adopted, with the hope of preserving the vitality of such parts as were not

already dead. A large tin vessel was ordered, having a tube one inch in diameter, and three feet in length, inserted in the side and near the bottom, with a latteral angle near the extremity, corresponding with the angle of the foot on the leg. The end of the tube was closed, and the under side pierced with small holes to allow the fluid to escape slowly on the limb. A plank of the proper width and of sufficient length to extend from the knee beyond the heel was procured; and deep grooves cut in it near the edges, to prevent the fluid from escaping on the bed. To protect the limb, it was cushioned and covered with soft oil-cloth. The extremity of the plank projected beyond the foot of the bed, (for which purpose the foot piece was removed,) and a vessel placed under it to receive the water. We had only now to place the limb on it, with a gentle inclination from the knee to the foot, and elevate the tin vessel so that the tube would project directly over the foot and as much of the leg as we desired. One nurse was enabled, with ease, to do more than three had done before. The bucket was filled, and the water passed on the limb, and down the inclined plane, to the vessel at the foot of the bed. Every thing was kept comfortable and clean, and what was more desirable, all pain ceased, except when the application of warm water was necessarily suspended, to remove the dressing. The water was thus continually and gently running on the part injured, for twenty-seven days; and the dressing (bandage,) re-applied as often as circumstances seemed to require. In a few days after the above plan was adopted, the soft parts sloughed away, leaving little else from the instep to the toes, and also on the bottom from the heel to the toes, but crushed and displaced bones, tendons, blood-vessels, &c. It become necessary to allow a generous diet, and a pint of porter daily, to sustain the system under the excessive purulent drain to which it was subjected for some weeks together.

So perfect was the recovery in this case, that the young man walked six miles in about three months after the accident occured, with no other inconvenience except a slight ulceration, and the discharge of some small pieces or spicula of bone. On a subsequent occasion, he injured the foot pretty seriously, but it was soon cured by a bandage, and his necessary confinement to bed by a pistol shot in the leg. The foot is nearly sound and

half an inch longer than its fellow. The irregular and promiscuous manner in which the bones are united, is still manifest, and indicates, to some extent, the amount of injury sustained. The deformity alluded to, and a slight halt in the gait, are the only unpleasant remains of the formidable injury.

Mr. D. had both bones of his legs fractured by springing from a buggy, when his horse was running off. The tibia very obliquely, involving the capsular ligament of the ankle joint; and the fibula at two points, three inches apart. The weight and impetus of the body, had forced the sharp extremity of the large bone down to the bottom of the foot, leaving the point covered only with the indurated skin; and the soft parts were otherwise much bruised and lacerated by the jagged extremities of the broken bones. But for the support and protection afforded by the leg of a strong boot, they must have been driven into the ground.

In this case, as well as in the preceding one, the bandage was indispensable; but there were important indications which it could not fill. I was anxious to lessen, as far as practicable, the sufferings of my patient; and to avoid the distressing restraint to which all patients are more or less subjected, under any system of treatment, with which I was acquainted; and also to avail myself of the delightful and soothing effects of warm water, upon which I depend, mainly, to control or prevent inflammation.

A box was constructed of light materials, as follows: The bottom was made of inch plank, and as near as possible, the length of the limb, from the heel to the ham or popliteal space; the side of thinner material, and projecting at both ends, six or eight inches. It was of sufficient depth to protect the limb, and admit of a cushion at the bottom, well adapted to its form; so that the pressure was equal at all points. To protect the cushion from water, an oil-cloth was laid in the box or trough, and upon it the limb rested. Extension and counter extension, if necessary, was readily effected by strips of muslin or strong tape attached to a bandage, which embraced the leg immediately below the knee, and attached to the ends of the projecting side pieces, above, and a handkerchief, or broad strip of muslin from the foot, by a pin in the projections below. The leg was confined in the box by strips which passed directly over it, and through

incisions made in the sides for that purpose. To prevent latteral motion, particularly at night, cotton wadding or wool, was inserted between the sides of the box and the oil-cloth; thus pressing gently, and without danger of irritation, on either side. By this simple expedient, the following advantages were afforded: The patient could lay on either side, or his back, with equal ease and convenience; he was enabled to get up and down, by the assistance of a small boy, or sit on a chair without pain or hazard of deformity. Warm water could be poured on the limb "ad libitum," by projecting the end of the box over the bed, and placing a vessel under it. I have adopted the foregoing plan of treatment in all cases of fracture below the knee:—My patients are free from pain, and rest well, and in every instance, have been cured without deformity; and last, though not the least important, it is scarcely possible for inflammation to take place, or exist for any length of time, if warm water is steadily applied, to the parts injured. It is not my intention to set up any claims to originality. It is a combination of that which is valuable, selected from the opinions and practice of our eminent American and French surgeons; and certainly possesses advantages over all others, particularly in cases of extensive injury, and threatened inflammation. With a well applied bandage, aided by the constant application of warm fluids, remedies so strongly advocated by Professor Dudley, amputation will rarely become necessary.

## PATHOLOGY AND PRACTICAL MEDICINE.

ART. 3.—*Cholera Infantum, its Pathology, Treatment and Prevention.* By B. RUSH MITCHELL, M. D., of St. Louis, Mo.

(Continued from page 349.)

Having dwelt at some length upon the other forms of Cholera Infantum, we proceed to remark upon the treatment most applicable to the *third* variety. Depending, as we have seen this to do, for its specific character, upon the mesenteric lesion, it is not reasonable to expect that it will prove very ameanable to medical treatment; yet, the fact that its mortality rates about one in three and a half, would seem to evince, that it is not so fatal as *a priori* deduction would indicate. And we believe, that a careful empiricism, would most probably still further lessen the rate of mortality. But speculation apart, we proceed to treatment. This may be divided in two kinds—palliative and curative; and it is susceptible of a still further division, as the disease is idiopathic, or a sequela of the second variety. First in order, we will notice it, as it succeeds upon the second form. And here we would remark, that every energy should be directed towards preventing such succession; swathing the child in flannel; bathing in tepid water; and, conjoined with the other remedies, if it be a child, a nourishing diet, and if not, the use of gentian, or some other vegetable tonic, will be found of eminent service. But, should all these means fail to prevent the termination, then we must prepare ourselves to combat the double form. The practice now serviceable, will, with a few exceptions, be that most beneficial in the uncomplicated second variety, which we have heretofore laid down. If we are timely in our attack upon the new manifestations, we may hope to arrest them. The most important means for this purpose will be found to be, the application of a flannel roller over the abdomen, to be removed twice a day, for frictions to the abdomen and spine, the *latter* part especially; and the *cold affusion.* Suppose, however, despite these, the complication becomes fully established. If so, another remedy must be called in that has a controlling influence upon glandular congestion, for this is undoubtedly, the first condition of the me-

senteric glands. Such a remedy is iodine and its preparations; but powerful as they are in general, they in this instance, often fail. Still, conjoined with the remedies we have named for the simple second variety, it is worth a trial. And if by those remedies, we can allay the unnatural irritability of stomach and bowels, and thus present a pure case of the *third* variety, we may hope for success with iodine. But, as long as the vomiting and purging continue frequent, it is a dubious remedy. Yet, it should be given. The manner in which we are accustomed to administer it, is to form an iodide of starch, and inject a more or less strong solution of it, up the bowels; the irritability of the stomach forbidding its administration by the mouth. Associated with this, is the application of ung. hyd. potass. to the abdomen and spine, which should be well rubbed upon the skin. There is but one article that affects glandular disease that we know of, that can, in this form of the disease, be administered by the mouth. A decoction of the leaves of the white walnut, is the article to which we refer. A tea-cup full of the strong decoction may be administered to a young child during the course of the day. Often it exerts a surprising influence, checking both the purging and vomiting, as well as evidently effecting mitigation of the gandular disease. Truth, however, compels us to admit, that there are cases where it does no good; but as far as we have observed, they were cases, where the powers of life had obviously succumbed to the malady. When all the means we have named fail, there remains for us but to palliate. To this end, sponging the body with tepid water, injections of port wine, &c., will be found to be of some benefit; but this complication of varieties but seldom fails to produce death, say in one out of three cases.

The third variety, as we have heretofore remarked, often originates *spontaneously*, and in this case, is analogous in its symptoms, to what has been styled tabes mesenterica, marasmus, &c. which by the way, we believe to be little other than the third variety of cholera infantum. The curative plan of treatment for this variety, is simple and easy to practice. It is to support strength and attack the glandular affection. This variety is essentially chronic in its nature, and hence the necessity of supporting the strength by nourishing, and, if possible, animal food, as soups. Every source of abdominal irritation is to be guarded

against—the whole body to be protected from atmospheric vicissitude by clothing composed of the best non-conductor; the body should daily be sponged with cold water, the colder the better; pure free air, *essential in all the varieties*, is more so here; and every thing that would tend to render sleep interrupted, such as heat of the head, from night caps, &c., should be sedulously avoided. For the removal of the glandular disease, iodine externally and internally is our sheet-anchor. The preparation of it to which we are most partial here, for internal exhibition, is the iodide of quinine; but if this cannot be had, then iodine and quinine should be administered together, in small doses; say, to begin with, for an infant, half a grain of the latter, and one-sixth of the former, thrice daily. Associated with them should always be, juglans cathartica and extract of dandelion; the two latter, for the purpose of keeping up action in the liver, as well as producing fecal discharges. Mercury, we deem to be contra indicated, yet it may be occasionally useful in the form of minute doses of hyd. cum creta, or calomel, to excite the liver, or quiet any uncommon irritation of the mucous membrane of the alimentary canal. When costiveness is present, as it sometimes is, or when it is thought advisable to procure a downward motion, and excite some little activity in the mesenteric gland, a procedure by the way, well calculated to prevent *iodism* which occurs most often, when the bowels are costive, the medicine used, should be bland castor oil. By following the plan of treatment here laid down, the mortality of this *pure* third variety, has not, in our hands, exceeded one in five, a result, which, compared with what was the rate of mortality, before iodine was discovered, is, we think, no small evidence that it is not, as many say, a worthless addition to the materia medica.

*Prophylaxis.*—This has been incidentally the subject of notice in the preceding remarks. But, as then it was necessarily general, no apology need be offered for its particular investigation. Confessedly, it is the *most* important subject that can engage attention in connexion with any disease; and especially so is it as regards cholera infantum; the most fearful among the many causes of infant mortality. Before entering immediately upon the subject of prevention, it is meet that we premise a few general remarks. It will be observed, by an examination of the

causes which we have named as operative in producing cholera infantum, that heat is omitted. We are aware, that to many, this will seem an unwarrantable omission, but it will be only to those who have not thought upon the subject. That *heat* exerts little if any agency in the development of cholera infantum, we think is a tenable proposition. The recognition of heat, as an efficient agent in setting up the disease, is, it appears to us, another instance of a hasty mode of deduction but too frequent, in medicine. The *only* reason urged by those who favor the heat-hypothesis is, that cholera infantum prevails most frequently when the temperature is high, viz: June, July, August and September. But, a little examination will show, that this is no reason at all. If heat were the prime agent, or an agent of any note, in inducing cholera infantum, *it ought to occur whenever and wherever a high temperature acted upon children.* Such, however, is not the case; cholera infantum is a disease of cities—of cities in temperate latitudes—and is rarely seen in the country. Although the disease is very prevalent in Philadelphia, yet, in the villages a mile or two from it, the disease is but rarely seen, though they and the city, are exposed to the *same* degree of heat. It rarely occurs in the country; when it does so, it is because of the prevalence of some malarious epidemic, and because of being in a malarious region. Cholera infantum is of frequent occurrence in Madison, Indiana; but except when bilious remittents are prevalent in the county, cholera infantum does not extend beyond the city limits. In the history of cholera infantum, by Dr. Blue, as it appeared in Chariton, Missouri, published in the Western and Southern Medical Recorder, for January, 1842, we are told that the disease *is of infrequent occurrence* in that region, though, during the past summer its ravages had been alarming. The reason for all this will be found in the statement, that "that summer was one of *unusual* sickness, *epidemics* being more severe than they had been know for years." As bearing upon the same point we may note Dr. Dunglison, (see Pract. Med., vol. 1, p. 158,) who says, "that in the nine years in which the author lived in Virginia, he saw *but very few cases.*" To the same purport speaks Dr. Eberle, (Diseases of Children, p. 286,) that during a residence of twelve years in the country, I met with *but two or three cases* of this disease in infants." But further, and to conclude on this point,

while the disease prevails extensively in temperate latitudes, it is but seldom found in warm climates. It may be seen every summer in New York, Philadelphia and Boston, while "it is unknown in Paris." (Billard) "Charleston, South Carolina, *so far from* furnishing more actually gives *fewer* cases of this diseare, than either Philadelphia or New York. My impression respecting New Orleans is, that it resembles Charleston in this particular;" vide, Bell's addition to Combe on Infancy, page 294.

If the facts we have detailed prove anything, it evidently is, that the direct effect of heat in producing cholera infantum, has been much overrated. Our own opinion of the causation of the disease is, that it results from bad-air—*malaria.* Such is the opinion of Bell, Dunglison, Copland, Eberle, and, indeed, all the authors that we have consulted upon the subject. The condition of the air thus efficient, is that *stagnant, dry and evaporating state* of the atmosphere, which a crowded city, narrow streets, ill-ventilated apartments, aided by a prolonged duration of very hot and dry weather, is so well calculated to engender. But even these causes require to be long applied, ere they produce their effect; hence, "the number of the sick, and the mortality from *cholera infantum*, are greater in the latter part of summer, or to October, *than in the first great heats of June;*" (Bell's addition to Combe, p. 294.) Then it is, that the disease invades the residences of the poor, where bad clothing, food and ventilation are present, as well as the dwellings of the rich, where the rooms are badly constructed for ventilation, and sweeps multitudes to the grave. A curious effect, and one which we shall have occasion to note at length of the condition of the atmosphere described, is the effect it produces upon the skin. We should not be wrong when we say, that the first inroad of the disease is through this channel. The skin, in all cases of the disease we have ever seen, was dry, burning, and coated with a glaze, more or less thick, and as a consequence, perspiration was suspended. The production of this glaze we feel compelled to attribute to the drying and evaporating state of the atmosphere, which is coincident *always* with the prevalence of cholera infantum. It arises, we think, from the watery portions of the perspiration being rapidly carried off, by the dry state of the air, and consequent deposition of the solid matters upon the pores of the exhalent vessels, and skin generally. Such

being the condition of the skin, a train of phenomena analagous to those induced by atmospheric vicisitudes is brought about; the function of cutaneous secretion is suspended, and the blood vessels of the surface contract, throwing more blood within, thereby setting up internal congestions; while, at the same time, the liver, kidneys and mucous membrane of the bowels have imposed upon them the duties which properly appertained to the cutaneous system. Such a state of things, it is needless to argue, is eminently favorable for producing that train of symptoms, which we recognize as belonging to cholera infantum. In fact, the first bowel symptom that we note, is one which would *inevitably* spring from such a state of things; to-wit. *hypersecretion*. The same is true of the liver, its first manifestation of disease being an increased flow of *unnatural* bile; the abnormal condition of that fluid being in all probability caused by a secretion with *it* of something which the skin used to throw off. Again we repeat, that rapid *fluctuations* of temperature will produce the same result upon the skin and general system, as does the condition of the air before alluded to. Through the skin we are convinced by long and careful study, does cholera infantum, or the causes that produce it, assail the infant frame.

With the conclusion of these indispensable remarks, we advance to the particular consideration of Prophylaxis. This we propose to consider under three heads: Air, Food, and Clothing. The importance of pure air, as a prophylactic agent, can hardly, we think, be overrated, with regard to any disease. But while this is generally true, the remark is doubly applicable to infantile hygiene, to all infantile diseases, and to cholera infantum in particular. One or two *facts* in relation to this subject are better than a thousand arguments. It is so well known in large cities, that their chlldren will escape the disease, and if they already have it, will be benefitted by removal, however transient, to the country, that physicians rarely have to inform the mothers of it. "I am sure," says Dr. Bell, (op. cit.) "that the lives of hundreds of children are saved annually in Philadelphia, by their mothers availing themselves of the resource offered, of crossing and re-crossing once or twice a day, the Delaware, and by spending a while on the Jersey shore." And so speak all writers, of the *bad* effect of bad air upon children, we will offer one fact: "Out

of 7,550 children born in the lying-in hospital of Dublin, in the space of four years, ending 1784, no less than 2,944, or more than one-third, died within two weeks after birth. It being discovered that there was insufficient ventilation, means were resorted to, to secure a constant supply of pure air, and the consequence was, the proportion of deaths *was reduced* to 279. It appears then, that out of the 2,944 who died in the four years specified, no less than 2,655, had perished *solely* from the want of pure air." Facts like these, require no comment from us; they speak in a language that cannot be misinterpreted, alike to the physician and non-professional reader.

Bad food has sometimes been specified as a cause of cholera infantum. But we think that more than a due share of importance has been attached to it. Fruits have been among the most prominently reprobated articles. But, that these are not to any great extent, the causes of the malady, is evident from two facts: first, that most of the cases of the disease occur among infants; and second, that those children who are in the habit of eating most of fruit, those living in the country, suffer least. But besides, there are many fruits, the eating of which, we would be disposed to include under the head of prevention of cholera infantum. While we would positively forbid the use of *all* unripe food, and that which, when ripe, is difficult of digestion, as tending to irritate the mucous lining of the bowels, there are some which possess no small amount of astringent principle, the use of which we deem eminently beneficial; of this nature is the Blackberry. The bad food that we have most to guard against, and which we can speak against with but little efficiency, is the *milk of the mother*. We have before adverted to this, and do so again, to lay down a few rules. Never should the mother allow her child to suck when, immediately preceeding, she has been excited by anger, or exhausted. Nor should she allow of it when she has been but recently exposed for sometime to the heat of the sun, etc. All these causes, and more that might be enumerated, have a powerful effect in deranging the normality of the mothers milk; and any change in that fluid, during the time when the other causes of cholera infantum are active, will but add to, or excite, if not pre-existing, the irritation of the alimentary tract.

The third, and last agent of Prophylaxis, of which we are to speak, is clothing. The danger of atmospheric vicissitudes to children, is because of their suddenness; that of atmospheric vitiation, of its long continuance. Owing to their more delicate sensibility, any impression made upon the skin, will be more quickly reflected to the sensorium, and a kindred change induced in the internal organs, than in the adult. The influence of either of the causes we have named is injurious, exactly in proportion to the youth of the child. This is because the vital heat, its generators, and the power of resistance are exceedingly limited in infancy. These being the facts in relation to the infant frame, the importance of protecting it from sudden impressions, is abundantly manifested. As we have just remarked, their capacity for generating heat, and of resistance, are very small. The indications then, would seem to be, in order to avoid the infant's being affected by the sudden changes of temperature, that it be clothed with a dress, which, while sufficient to permit the proper performance of the functions of the skin, will also protect it against the influence thermal variations. The object of clothing them is, to preserve the temperature of the body equably, thus allowing the functions of the skin, as well as that of the whole body, to be fairly performed; and it is especially of consequence, to preserve the natural heat of the chest and *abdomen*, to seclude them from external impressions; for these are the parts, obnoxious to the invasion of infantile disease. These indications, we *used* to think, would be best fulfilled by an imperfect, or non-conductor of heat. We *used* to think, that when all authority told us, that the infant had need, during the first year or two of existence, of *all* the heat it could develope; and that it was of the highest importance, that it not only be retained, but also, that any temporary change in its quantity should be prevented; and also, that for these purposes, a garment worn next to the skin, a *non-conductor of heat*, was requisite, and nothing so good as fine flannel. It was *true* we *used* to think in this way—*perchance* we do so still.

We say *perchance*, for, until we have sifted an article in the Western Lancet, volume third, page 60, et seq., upon "Flannel;" we cannot speak positively. On page 52, the author says: "A non-conductor of heat is not required by the animal body.

when the temperature of it is nearly equal to that of the atmosphere. It is needed to protect the body when the atmosphere is cold, or when the body is exposed to intense heat." Although it is true that a non-conductor is needed in the last named cases, yet the major part of the proposition, is contrary to fact, and absurd. The writer seems to be altogether ignorant, that the infant has less capacity to generate heat than the adult, as well as, that its actual temperature is less, 94¼.* And also that the body of the infant and man, is ever *parting* with caloric. Had he known these facts, we feel confident, he would not have advanced so untenable a doctrine. A non-conductor then, is required as a dress for the infant. It is required at all times, and especially in temperate latitudes, where thermal variations are so general. Though the temperature of the day may appear to an adult to be uniform; it will not be so with the infant; a variation of two or three degrees affecting *it* far more than would a variation of 10 or 15, the adult; and for the obvious reason, of the less capacity of resistance in the child. But further; health requires that the heat of the body shall not rise above the natural standard; if it does, we have fever. To prevent this, if the child is in a temperature exceeding 94¼, it must obviously be clothed with a non-conductor, which shall exclude the external heat.— And as health requires that the body shall not be hotter than natural, so it also requires, that its temperature shall not be below the natural standard; and for this indication, where shall we look for its fulfillment, but to a non-conductor. It seems then that both extremes, a higher or lower temperature than natural, are inimical to infantile health; and inasmuch as in our climate, there is no day in the year, when the thermometer does not vary in 24 hours, from 10 to 15 or more degrees, it is obvious that the infant constitution requires to be protected from its influence. Nor is it less important to observe, that the infant's system has less capacity for *accommodating* itself to the thermal changes; *it requires more time* to accommodate itself to a *small degree* of variation, than the adult does for a large one; and hence it is necessary that it be assisted. Conclusive as are these facts, there is one still more so, that proves incontestibly, *that there is more need that the infant be clad in a non-conductor in summer, than even in winter.*

* Bostock's Physiology, note to Animal heat.

The fact is this; "Dr. Edwards† found that the mammalia, when exposed to a low temperature in *summer*, rapidly lost heat, the refrigeration during three hours being from *six to twenty-one degrees;* but that when they were placed in the same circumstances *in winter*, the refrigeration was not greater than *two degrees* in three hours." Facts like these, might be multiplied, ad infinitum, but we deem that enough has been said to show, that the dogma set forth by the writer referred to, is without even the shadow of truth. Chemistry, physical facts, and the concurrent testimony of the profession, stamps the seal of falsity upon the doctrine. If what we have adduced is not satisfactory, we refer to Carpenter's Physiology, page 560; Dunglison on Hygiene; Combe on Infancy, &c.

Turn we now to another, and still more curious doctrine of the same writer. "I suppose there is another *cause* of the frequency of this complaint, *cholera infantum.* I mean the wearing of *flannel shirts.*"—"By this fashion of clothing, the abdomen, which is principally supplied by what anatomists call the ganglionic system of nerves—nerves of animal life, or nerves of *no sensation, is constantly stimulated by the friction of a flannel shirt,* aided by the heat of the weather, the obvious effect of which is, that the limbs, &c., are cool, while the body is hot. The physiological, or perhaps we should say, the pathological *effect* of which is, *to cause internal congestions.*" Again, page 13, "It (*a flannel shirt,*) *stimulates, by friction, the delicate nerves of animal life,* which are distributed about the abdomen, giving rise to itching of the skin, *hives, the heat,*" &c. Such is the remarkable discovery of the distribution of the ganglionic system.

A simple inquisition into what are the facts of the case, will put the doctrine propounded alongside with the reveries of Duns Scotus and Paracelous. What are the facts? It is a *fact*, as notorious as that the sun shines, that cholera infantum is a disease of large cities; and is, emphatically, *the disease of the ill-clad poor.* It is a fact, that these children *are not wearers of flannel;* but on the contrary, so notorious is their destitution of it, and so convinced are those physicians who have had large experience of the disease, of its efficacy as a *preventive*, that the Dispensaries are in the habit of furnishing it when possible, in

† Carpenter's Physiology, p. 562.

addition to medicine. It is prescribed as, what experience has proved it to be, a *preventive.* We profess to have had no small experience in the disease, and out of some hundreds, we never met with but *three cases* where the child wore flannel next the skin. Nor are we without ample authority when we affirm, that the wearing of a flannel garment next the skin, is a preventive of cholera infantum. Setting aside our own experience, we refer to the able work of Dr. Copland, Art. Chol. Infantum. "The prophylactic measures may be briefly stated to consist of *wearing flannel next the skin,*" &c. "In cold and temperate regions of the globe, it forms one of the best protections to the body. The author has worn it for many years *through the summer*, in Virginia, and does not think he suffered more from the heat, than when without it. He has thought too, that with many infants, under two years of age, the *tendency to bowel affections, has been obviated by having flannel* next the skin." Thus wrote Dr. Dunglison in his work on Hygiene, page 390–1, in 1835. A year or two afterwards, he removed to Philadelphia, and after an experience there of some six or more years, thus writes in his Practice of Medicine, vol. 1, p. 161. "The *constant* use of flannel bandage, *even through the heat of summer*, is not one of the least important articles of prophylaxis." These are positive assertions, founded on experience; and that they are true, all writers testify, and indirect testimony confirms. Covering the abdomen well with flannel, is prophylactic in almost all abdominal diseases, especially those of a kindred nature to cholera infantum. Thus, Dr. Thatcher, an eminent physician of the Revolution, says, that in the camp-dysenteries, prevalent to such an alarming extent among the soldiers, during that long struggle, *those who wore flannel next the skin,* UNIFORMLY *escaped.*" So too, speaks Dr. Robertson, in his history of the New Orleans campaign:* "A strictly regulated diet, and the use of flannel next the skin, were of the *highest* importance." Again,—"The utility of flannel worn next the skin, was obvious in the revolutionary war. *No one* of the officers *who were thus clad was indisposed* at the siege of Savannah, and *no one of them escaped sickness who was not provided with this internal covering.* The troops from Wyoming county, Pennsylvania, who wore flannel shirts next their skins, were rarely seen

*Johnson on Tropical Climates, vol. 2, pp. 302–322.

in a military hospital."* See also, Pringle on diseases of the Army, p. 253, &c.

But lastly, it is a fact, that a flannel bandage to the abdomen, is one of the best methods of combatting cholera infantum when established; yet, it is alleged that the use of flannel tends "to produce internal congestions." When we consider the fact last mentioned, that a flannel roller to the abdomen is a curative agent of no small value in the treatment of cholera infantum, and so acknowledged to be, by the author, the proposition that flannel next to the skin is productive of internal congestions, savors not a little of the ridiculous. Nor does it lose that character, when we read, that these congestions are caused by irritation of the skin, or rather of the ganglionic nerves, which the writer referred to, seems to have found *distributed to the skin of the abdomen.* Be his discovery true or false, however, it does seem to us strange, how these nerves, which he himself calls "nerves of *no* sensation," can be stimulated by friction, or experience any sensation whatever. We have been accustomed to think, that for a nerve to experience such an impression as friction, it was necessary that it be a nerve of *common sensation;* but according to the position referred to, a non-sensitive nerve may do it better. But worse and worse, he tells us that this "friction of the delicate nerves of *animal* life, produces hives, the heat," etc. Who shall say that medicine is not a progressive science? It is not true: 1. That a non-conductor is not a suitable garment, the most suitable dress for children. 2. It is not true that the wearing of flannel next to the skin, is productive of cholera infantum; but *directly the reverse* is the fact. 3. It is not true, that the ganglionic nerves, nerves of animal life, are distributed to *the skin* of the abdomen, and are thereby stimulated because of the friction of the flannel; and even if they were there disposed, being "nerves of *no* sensation," they could not appreciate and respond to the friction. 4. Much less is it true that friction of the skin, can set up "internal congestion." This is abundantly confuted, first, by the treatment of cholera infantum by a flannel roller; and second, by the unanimous consent of the profession to apply blisters, counter-irritation, &c., for the *relief* of congestions, to the superimposed skin. And besides, allowing

*Rush's note to Pringle on the Diseases of the Army, p. 37

the flannel to excite ever so great friction, the opposite of "internal congestions" must ensue, unless the long recognized axiom, that *ubi irritatio ibi affluxus*, be a figment of the fancy.

We are compelled then, to maintain the efficacy of flannel as a prophylactic, even though it irritate the skin. A glance at the peculiarities of the infant organization, will but strengthen our position. Of all organs, those of the abdominal cavity, are developed to the greatest extent during infant life. As a consequence, a vast proportion of the infant's blood is distributed to the abdomen; and in accordance with the law, that "where there is a greater volume of blood, it is proportionably liable to be impaired in its distribution," the abdomen of the infant is very obnoxious to various irregularities in the distribution of its blood; and, therefore, disease is readily set up in that portion of the frame. This is the *theory*—do the facts accord with it? Unquestionably they do; since nine-tenths of the diseases of early life are abdominal. It is of importance then, to prevent as far as possible, these abdominal congestions, and a moments reflection will convince an enlightened man, that flannel worn next to the skin, in addition to its other valuable qualities, will fulfill this indication, remarkably well. Internal congestions, we need hardly say, are most common in warm weather, when the powers of the system are relaxed, the hearts action but feeble, and nervous energy deficient. The blood consequently becomes pent up in the interior; but apply a stimulant to the skin, and the tonicity of the extreme vessels is strengthened, so that they become capable of performing their duty, assisting the heart. We desire then, something which shall do this, which shall set up excitement in the skin, and derive the blood from the interior. To effect this, we apply flannel to the skin: a gentle but continued excitement is set up; blood is drawn outward, finds egress, is diminished in quantity, by cutaneous secretion. An important assistance, too, is thus given to the liver; the skin *shares* with it now, the duty of depurating the blood, and thus, the healthy, natural balance is restored.

Nor is any danger to be apprehended from increasing the amount of blood in the skin, because it will certainly relieve itself, if oppressed. Its opportunities for effecting this are infinitely greater than those of the abdominal viscera, since its exhalent

vessels open by a thousand mouths in a square inch, and can deplete as much as the wants of the skin, or the general system may require. No harm then can result from the use of flannel; for, even allowing that it may set up congestion of the skin, this is not a serious result, but rather *beneficial*, and is clearly to be preferred to the development of *internal* congestions, which are almost certain to occur, if the use of flannel be rejected. By *all* means then, let infants be clothed with a flannel dress next the skin. *That it will* preserve them from cholera infantum, we have clearly proved by inference, and by the positive declaration of physicians who are well acquainted with the disease—*that it does*, we have *verified for ourselves, by scores of cases.*

For day, then, let the child wear a close fitting flannel shirt, with sleeve, and fitting in the neck, above the clavicle; or if but one article of dress be used, let it be a flannel gown, not coarse and rough, but fine. For night dress, the same kind of garment, made quite loose, and long enough to cover the feet, around which, or below which it may (if the child kicks the bed clothes off in the night) be tied, so as to enclose it in a kind of bag. We have often recommended these, and have *never* had cause to regret having done so.

To conclude. We have dwelt at greater length than we had contemplated upon the last division of our subject. But its immense importance will, we trust, excuse us. We are conscious that we have treated the whole subject but imperfectly, but if we can induce any to follow what we have directed, we have no higher ambition. All we seek is to subdue disease; and, therefore, we again urge the importance of flannel as a preventive. Adopt it, and the physician will have the pleasure to find, by a decrease in the frequency of the disease in his neighborhood, that he has been a blessing to his kind. We are conscious that the divisions we have made of cholera infantum is novel, and may, by many, be thought useless, but we have ever thought, that nothing is lost in medicine, by perspicuity of description. That the varieties we have described do exist, is certain; and he who examines, will soon become satisfied of the fact. But be we right, or be we wrong, we are free to confess that we have expressed nothing we do not seriously entertain; and, therefore, if we have published error, have not done so wilfully.

ART. 4.—*A case of Congestive Fever successfully treated by the affusion of Cold Water, and the free use of Quinine.* By ASBURY EVANS, M. D., of Jeffersonville, Indiana.

G. M——, a German, æt. 35, had been sick about four weeks with bilious fever, and chill and fever. He had partially recovered his strength, and went to work on the 9th of October, in a neighborhood much afflicted with congestive fever; returned to Jeffersonville on the 11th, and without much previous complaining, had an attack of that disease at 12 o'clock, P. M., of that day. I saw him at 8 o'clock the next morning; and he was lying motionless on his back, unable to protrude his tongue, blind, deaf, and bathed from head to foot in perspiration. His skin was uniformly very hot; his pulse full and pretty strong. Bled him from the arm to the extent of about twelve ounces; gave him three drachms of paregoric; and as his abdomen was swelled, and not having had an operation from the bowels for some time, gave twenty grains of calomel; applied a blister to the nape of his neck, and a small one to each temple. I saw him again in two hours, and to my great surprise, found him much improved. His eyes had a better look, he put out his tongue, and, by signs, called for water. I ordered him five grains of quinine every hour. At 4, P. M., saw him again, seemed to be doing well. Directed the quinine to be continued until he should take fifty grains.

His brother called at my house during the night, to inform me that the patient had, about 3 o'clock, been attacked with another fit of the disease. I could not visit him until 7 o'clock; when I found him in the same alarming condition that he was in on my first visit,—motionless, blind, deaf, and, except that his skin was hot and pulse pretty full, with no signs of life. He was, as on the previous occasion, bedewed with sweat. I at once stripped off his shirt, and, in opposition to the earnest entreaties of his brother and friends, laid him on the floor, and took a bucket full of cold water and dashed it upon his naked body. This aroused him from his death-like state, and he cried out lustily. Dried him off with towels, put him to bed, and watched the effects of the bath. Not more than twenty minutes had elapsed, when the heat and coma began to return. I had him again taken out of bed, and this time, without any opposition from his friends;

indeed, such had been, to them, the magical effects of the cold dash, that they now eagerly assisted in removing him to the floor. I dashed over him a bucket full of water, which had stood out in the severe cold of the previous night, with the effect of immediately restoring him to consciousness. Directed seven and a half grains of quinine every half hour. In two hours, visited him. He had now taken thirty grains. Ordered the interval to be prolonged to one hour, and the quinine to be continued until thirty grains more should be taken.

The next day I considered him convalescent. With the use of a little oil, and an occasional Dover's powder, he was walking about his room on the 19th, that is, eight days after I first saw him.

The cold dash was employed during the first day that I resorted to its use, four times, that is, when the heat of the skin became considerably elevated; and I am fully satisfied, that without the combined influence of this remedy and the quinine, the patient must necessarily have died; and I am further convinced, that had I used the quinine in the small doses usually given, it would have failed to produce the desired result. On the 12th, I ordered him fifty grains of quinine, but all was not taken, I think not more than thirty-five grains; that night he had another attack, but on the 13th he took a drachm, and the disease was cured.

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ART. 5.—*Case of Diseased Liver and Kidnies, with peculiarity of symptoms.* By EDMUND SHARLEY, M. D., Jersey.

A retired medical officer, who had for thirty years resided at St. Helena, has had acute hepatitis, for which he was bled largely two years ago. Within two months had a formidable attack of intestinal obstruction, which reduced him to death's door. Has since been slowly recovering, but has been distressed by fits of vomiting recurring daily between 12 and 2, P. M.; also pains said to be rheumatic or gouty in legs particularly affecting the extensor muscles, with anorexia. He consulted me to-day (February 2d, 1845,) and complained much of the pains in legs, also of a pain at epigastrium, nausea and tympanitic abdomen; tongue was moist, no febrile heat, pulse 74.

Feb. 23.—I was called at day-break, and found him suffering under an increase of pain in abdomen, with vomiting which had prevailed to a distressing amount all night. Bowels confined

for three days; no fever. Prescribed fomentations, and threw up a fœtid enema.

℞. Aloes, gr. ii.; Ext. Hyosc. gr. i.; ft. Pil. sing. horis.

Enema returned alone. Threw up another, containing turpentine, with a like result. I repeated various enemas during the day, without any feculent evacuation; pulse 76. No thirst, great discharge of flatus by mouth, and accompanying expulsion of enemata. Towards evening became very restless, and complained of increased pain; pulse 80.

Sum. Pil. ii.; ex. Ext. Coloc. c.; Pil. Hyd. c. gr. iiss.; Continuentur Fotus et enemata; et si. op. Hirud. xxiv. abdomini.

24th.—Leeches applied. Has taken two of the aloetic pills as above, and an Enema Cathartic ex. Decoct. Chanom. Some feculent matter was evacuated, and he slept for two hours. Abdomen reduced in size, and he seems much easier; pulse 104, soft and weak. During this day he became incoherent, pulse rose to 120, very weak, and he had one or two severe rigors on getting out of bed to stool. Has had two bilious-looking stools. Extremities inclined to cold. Dr. Scholefield was now called in to my assistance. The discharges being highly dark and offensive, and it being apparent that the liver was congested, Calom. gr. x.; Confect. Op. gr. i.; were ordered; and wine and beef-tea, which he had been taking, were discontinued.

25th.—Had a large motion before taking calomel, and two during the night. Some sleep, accompanied by wandering; towards morning some hiccup. Pulse weaker; tongue flaccid, and cool. Gave a glass of wine, made into negas, also some broth. Has passed much flatus.

To have broth, and brandy and water.

Suppression of urine, stools highly bilious, fœtid, and containing a great deal of fluid. A mixture as follows was prescribed, with a view of restoring, if possible, the urinary secretion.

℞. Spt. Æth. Nitr. ʒi.; Ol. Myrist. Mvi.; Ext. Sarzæ, fʒij.; Ol. Junip. Mvi.; Aquæ Menthæ, ℥vii.

It is needless to pursue this case to its fatal termination, which took place on the morning of the 1st of March. There had been total suppression of urine for four days.

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*Examination twenty-four hours after death.*—The integuments presented a coat of fat fully an inch thick, and there was a greater general deposition of adeps on the internal organs than I had ever previously seen. Liver very much engorged, soft, and easily broken down; a little bile in gall bladder. Duodenum and stomach normal, but distended with gas; ileum contracted in some part of its length, but restored to its natural uniform calibre by

inflation; tortuous veins seen ramifying on its external surface; numerous globules of fat seen deposited between the peritoneal and muscular coats. It contained bilious matter of same character as the evacuations during life. Kidnies each imbedded in a quantity of fat, weighing above half a pound; they were small and altered in structure; tubuli not distinct, and the pelvis completely occupied by fat: they presented no urinous smell; bladder quite empty, and found with difficulty in a quantity of very fat peritoneum; mesentery completely interlarded.

It is very remarkable, that this patient had never laborad under any urinary affection, (by his own account at least,) either as regards secretion or excretion, and yet there can be no doubt that the disease was of long standing. He had been long used to high living in a warm climate, where the skin performs so much of what would elsewhere be the work of the kidnies; and from these two circumstances arose, probably, the comparative atrophy and fatty degeneration of these organs. The same circumstances in all probability gave origin to the engorgement of the liver, and when he removed into a temperate climate, where the kidnies were called upon to do their own duty, the balance was lost, and the chain of morbid actions was set up which caused his death. It is quite certain, from the great quantity of fluid passed by the bowels, while the ischuria existed, though but a small quantity of drink was taken in, that the liver and intestines performed a vicarious office, and thus prolonged life for a little.

Now, viewing this not as an isolated case, but (as I believe we are warranted) as the type of a class, is there not some instruction of importance to be derived from it? It is too true that Europeans in general, who go to reside in tropical climates, take no precautions against the consequences which might be naturally expected to result to their constitutions from so great a change. Instead of adopting a diet similar to that upon which the natives maintain a sound state of health, they persevere in the use of the same quantity of stimulating food, which in a cold climate is (if not necessary) at least *managed* by the system. This, in a situation where the carbon is more apt to accumulate, soon leads to engorgement of the liver. Again, from the increased activity of the cutaneous exhalents, a comparative torpor of the kidnies ensues, and wherever there is a diminution of function it is a law of nature that there will be arrest of development, or even positive atrophy: hence, upon their return to their own climate, a new source of danger. The kidnies are called on suddenly to resume their former functions, and instead of allowing them time and opportunity to recover themselves by a suitable regimen, they are too often put on extra duty by an increased allowance of stimulating drinks; and hence the twofold mischief which took place in the case under consideration. These are points which ought to be impressed upon the minds of those who

are leaving or returning to their own homes, from the fervid regions of the tropics; and I most respectfully submit them to the notice of the profession with that view.—*London Med. Gaz.*

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ART. 6.—*Abnormal Murmur in cases of Phthisis.*

"I must here find a place for noting a certain auscultatory phenomenon, which, though it may not have struck the general observation, is frequent and familiar to my own, and has gained an importance in my eyes from the pathological condition with which I have found it associated. To the ear it claims kindred with endocardial murmurs. But although the heart may be instrumental in producing it, it is not at all perceived within the præcordial region, but in a certain definite and circumscribed space beyond it.

"Fancy a line drawn from the left side of the sternum along the upper edge of the second costal cartilage, and continued an inch along the second rib; and another line drawn from the sternum along the lower edge of the third costal cartilage, and continued an inch along the third rib. Between these two lines a space is included, in the whole or in part of which a murmur is often audible coincident with the systole of the heart, when no such murmur can be perceived either in the præcordial region, or in the course of the aorta, or in the cartoids, or in any part of the arterial system, but here, and here only. It is a gentle bellows-murmur, quite obvious to the ear, and unmistakable in its character. Of such a murmur, often audible in this situation exclusively, I am certain as a matter of fact, and certain too of its very remarkable accompaniments. I have witnessed either in those who were undeniably consumptive, or in those who were too justly suspected of being so. I cannot say in what proportion of the phthisical it occurs, but I am continually meeting it."

*Dr. Latham's Clinical Medicine.*

[REMARKS.—Dr. Latham has gained no explanation of this sound by dissection; he has only a clinical experience in the matter. But where from his direct examination of the lungs, he cannot get beyond a suspicion of tubercular disease, the murmur in the space indicated, always contributes to confirm it. Dr. Latham does not mention whether this sound continues while the patient's breathing is suspended; and from the account given it is uncertain whether it be cardiac or pulmonary.—ED. GAZ.]

*London Medical Gazette.*

## MIDWIFERY.

ART. 7.—*Remarks on the Division of the Symphysis Pubis in some cases of Obstructed Labor.*

The inefficiency of this operation as a means of preserving the lives of both mother and infant, in cases of extreme pelvic deformity, appears to have been long decided upon in the minds of most practical accoucheurs. Dr. David Smith has, however, again brought the subject under discussion in a paper of considerable research. He agrees with previous writers that symphysotomy, as a substitute for the Cæsarean section, in cases where the pelvis is greatly deformed, "offers no increased chance of safety to the mother or child, inasmuch as in cases of distortion the diminution of space is principally in the antero-posterior diameter; and Dr. W. Hunter and others have shown, by experiments made on distorted pelves, that, to increase this diameter an inch the pubic bones must be separated three inches;" while, from a series of very carefully conducted examinations made on recently dead females by the author and Dr. Menzies, it was found that the greatest extent to which the pubic bones could be separated, without the sacro-iliac ligaments giving away, never exceeded an inch and a sixth, and that, before this space was gained, a crackling sound was heard indicative of laceration. They further convinced themselves that the capacities of the pelvis could be increased in its diameters, but least of all in the antero-posterior, by the division of the symphysis pubis; that the distance to which the ossa pubis separated from each other by the mere section of the cartilage depended greatly on the position of the trunks and limbs; that the force requisite to separate these bones was much greater than could justifiably be applied within the soft structures of a living female, such as drawing down the fœtus into the pelvis, and through it; and that, when the division of the cartilage was carefully made, neither the bladder, peritoneum, nor urethra, were in any respect injured. Still, Dr. Smith considers that, "had the proposer and first supporters of symphysotomy confined its application to those cases in which the contraction of the pelvis is slight, it might have been substituted with advantage for cranotomy altogether, under certain limitations." "We can readily believe," he continues, "that cases do occur in which the obstacle to delivery is too great to be safely overcome by the use of the forceps, and where the increase of even less than the quarter of an inch to the contracted diameter might enable the child to pass alive—in short, where delivery is barely impracticable by the forceps, and where it just becomes necessary

to open the head. Thus—to use the language of Dr. Burns—'there is but one degree of disproportion betwixt the head and the pelvis which will admit of the division;' and, I would add, there is but one form of pelvic obstruction in which it would be justifiable to operate: I allude to that in which the brim is sufficiently large and well-shaped to permit the passage of the head of the child easily through it, but the tuberosities of the ischia approach so near to each other as to obstruct delivery—the pelvis is what is called 'funnel-shaped.' In these cases labor proceeds naturally, and without interruption, until the head has reached the outlet, when we find that all farther progress is arrested, and the labor can only be terminated by the employment of the perforator. Such are the only cases adapted for symphysotomy; for where the contraction is in the anterior-posterior diameter, the division of the symphysis, and separation of the ossa pubis, are less calculated to give increase of pelvic capacity than when the inlet and cavity of the pelvis are well formed, and the contraction is between the ischia. In the experiments above alluded to, we found that the increase of the anterio-posterior diameter was nearly seven-sixteenths of an inch by separating the pubic bones to an inch and a half; whereas the increase between the ischia was ten-sixteenths. If, therefore, a case were met with in which, after the careful but unsuccessful application of the forceps, it could be accurately ascertained that a slight enlargement of the pelvic outlet would permit the delivery of an entire child, would it not be more justifiable to have recourse to symphysotomy, by which both parent and offspring might be preserved, than to sacrifice inevitably the one, although such practice did afford a better chance of preserving the other, if the labor had not continued so long as to have endangered the recovery of the mother, and no uncertainty existed as to the child being alive? But in a case where the head is high, and prevented from entering the pelvis by contraction—no matter how slight—of the antero-posterior diameter, this operation ought never to be attempted, because the degree of deformity at the brim cannot be satisfactorily ascertained, and this diameter receives least increase by the separation of the pubic bones; nor should it be resorted to under any circumstances when the child is known to be dead."

*Northern Journal of Medicine.*

[Upon a question of this kind there may be some diversity of opinion; but we have always felt that, where the preservation of the child involves a severe operation upon the mother which at all imperils her life, the woman should never be advised to submit herself to that danger.—Ed. Gaz.]

*London Medical Gazette.*

## Art. 8.—*Puerperal Fever in Ancient Times.*

This disease appears to have been very prevalent, in the early part of the sixteenth century, among ladies of the higher ranks. Elizabeth of York, Queen of Henry the Seventh, died of puerperal fever nine days after the birth of the Princess Catharine, and after only two days' illness. Her death was so unexpected, that the physician whom the king depended on for her restoration to health was absent at his dwelling-house beyond Gravesend, and it was in vain that Dr. Hallyswurth travelled through the night with guides and torches to his royal patient in the tower. Lady Boleyn, the mother of Henry the Eighth's queen, died of this disease.* It is by no means a decided fact that Queen Jane Seymour died from the effects of the Cæsarean section: those historians who declare that she underwent this operation are so palpably incorrect in some parts of their statements, that their authority deserves very little credit. The report of the Privy Council of the birth of Edward the Sixth, still extant, affirms that she was "happily" delivered, and died afterwards of a distemper incidental to women in that condition—probably puerperal fever. An original document respecting the health oi the queen is still extant; it is signed by Thomas Rutland and five other medical men, and dated on the second Wednesday after the birth of the prince. "These shal be to advertise yor lordship of the Queen's estate. Yesterdai afternonne she had a natural laxe, by reason whereof she beganne sum-what lyghten, and (as it appeared) to amende; and so contynued till towards night. All this night she hath bene very sych, and doth rather appaire than amende. Her confessor hath bene with her Grace this mornyng, and hath done [all] that to his office apperteyneth, and even now is preparing to minister to her Grace the sacrament of unction. At Hampton Court, this Wednesday mornyng, at viii. of the clock." (Cotton. MSS. Nero cx.) The queen died at twelve o'clock that night, as we learn from a manuscript in the Heralds' College; this "departyng was the twelf day of the byrthe" of the prince. Queen Catharine Parr died at Sudeley Castle seven days after the birth of a daughter. It would appear from the circumstances attending her decease, that she also perished from puerperal fever. The absurd custom of the time, which compelled ladies to remain in their chambers for a month previous to their confinement, the windows being closely hung with heavy folds of arras, doubtless, in great measure, conduced to render them liable to this malady.

* Lives of the Queens of England.

## TOXICOLOGY AND THERAPEUTICS.

ART. 9—*The Antagonism of Poison and Disease.* By THOMAS D. MITCHELL, M. D., Professor of Materia Medica and Therapeutics in Transylvania University.

I have chosen the caption prefixed to these remarks, because of its brevity, rather than for its explicit character. The point to which I desire to call attention, specifically, is one that has entered into my public teachings for several years; and I am free to confess that I do not yet comprehend it fully. I refer to the fact, about which there can be no difference of opinion, (I mean as to its existence,) that decidedly poisonous doses, so far as bulk or weight was concerned, have been frequently swallowed without material injury, and that too, independently of any condition of the stomach sufficient to account for the result. The doctrine that has appeared to me, as the true solution of the problem is, that in the most striking cases on record, the otherwise *poisonous dose*, has *spent its force on the morbid action present in the system*, whatever that may have been, and in this way, its legitimate character has not been developed. I have not met with a single direct reference to this view of the case, any where, excepting in a short article lately published by Dr. Beck, in which there was an incidental allusion to it.

I am well aware of the effects of habit, in controlling the mischievous action of poisons, so as to render them quite harmless; but I have no reference to this agency on the present occasion, for that could not meet the difficulty.

The case, most familiar to the profession, illustrative of the doctrine, is the administration of very large doses of Tartar Emetic, in the treatment of Pneumonic inflammation. Here, the dose is often so great, as to be exceedingly hazardous, if its operation were restricted to the stomach. The idea of *tolerance* is associated necessarily, with the fact that some other organ besides the stomach is to participate in the agency of the remedy; that other organ is the lung, which feels the influence of the medicine, in its restoration to the condition of health. Now, although we cannot demonstrate all this, just as if it were a

problem in Euclid, we are compelled to believe, that the salutary influence of great doses of Tartar Emetic, in this disease, invokes the principle which it is our purpose to illustrate. We do not desire to be understood here, as advocating this plan of curing Pneumonia, but simply, as attempting to account for the result, by the obvious antagonism of disease and poison.

The modern use of mammoth doses of nitrate of potash; is another case in point. Every reader of the journals has learned, that this medicine has been employed in doses of two drachms, and even a half ounce, without developing the smallest evidence of poisonous action. So generally has the deleterious quality of nitrate of potash been associated with even two drachm doses, that some have objected to potash as an antidote to nitric acid, because a poisonous salt must needs be formed in the stomach. In acute rheumatism, in hæmoptysis, and other diseases, the great doses fail to exert a toxicological agency, simply by reason of the medicinal power acting wholly on the morbid action present in the system. It is remarked by Pereira,* "that peculiarities of constitution and morbid conditions of the system, (especially affections of the stomach,) are principally concerned in modifying (whether increasing or diminishing) the tolerance of this salt."

It may be impracticable to explain how these large doses spend their force on the morbid action, rather than on the stomach. Some of the late speculative writers have suggested the idea, that all medicinal agents are negatively or positively electric, and that affinities, attractions and repulsions, are modified by the varying influence of these opposite states. But this suggestion does not meet the case, and all we certainly know is the naked fact.

A case was reported in a foreign journal some years since, of a woman who had a dropsical husband, whose long continued indisposition had become exceedingly burthensome. She resolved to get rid of him, if possible, by administering an ounce of tincture of digitalis. The quantity was large enough, as every one knows, to kill or greatly injure an ordinary patient. But the wife was sadly disappointed, as the intended poison effected an entire evacuation of the effused fluid, and a most unlooked for

*Vol. 1, page 424.

recovery ensued. This fact is not isolated, for others of a similar character have been recorded.

What shall we say, in attempting to analyse the case? Is it not apparent, that there was really and truly, an adaptation of the poisonous dose, to the existing morbid condition, and does not the fact clearly illustrate the doctrine of antagonism?

The well authenticated agency of tobacco as an antidote for the poison of arsenic, or rather as a remedial agent, is explicable on the same ground, precisely. The cases reported were females, who had never indulged in the use of tobacco. A portion of arsenic, fully sufficient to kill under ordinary circumstances, was counteracted by the use of tobacco, and without any emetic action. What were the facts as regarded the pathological condition of the stomach? The arsenic had commenced its appropriate action, beyond doubt, as the symptoms evinced; there was very probably set up, true inflammation, such as arsenic is competent to establish. How then were the patients saved? The tobacco was given in strong infusion, expressly with the design of vomiting, and so dislodging the poison. But the emetic action failed, entirely, and yet the patients were restored, after comparatively little suffering.

I know it has been said, that the arsenic and tobacco formed a neutral mixture, in which the poisonous property of both articles was lost or nullified. But it is more probable, that the intrinsic character of tobacco failed to display itself, because its power was spent, on the existing morbid condition of the stomach and bowels.

In offering these remarks and cases, on the antagonism of poison and disease, I am anxious to correct erroneous impressions regarding the effects of very large doses of medicines of an active nature. It is too common, when these doses fail to poison, even though a curative result follows, to attribute the absence of poisonous symptoms to defect in the remedy, as occasioned by original impunity, or bad preparation. These, no doubt, often seriously affect the therapeutic application, and merit attention. Yet is it true, that defective observation suffers palpable results to be overlooked, which when properly analysed, not only fail to show any defect in the quality of the remedy, but prove, most conclusively, the doctrine of antagonism of poison and disease,

as herein set forth. To this subject, we particularly invite the attention of our brethren.

Some may be ready to infer, that I have forgotten the opinion often advocated, that many forms of disease are products of a veritable poison, the precise nature of which is unknown; and that in this view of the matter, it would be more philosophical to speak of the *autagonism of poison and poison.* But if this be correct, and we do not say it is not, the same thing would apply to every case of disease for which we exhibit acting remedies, as nearly all our energetic medicines are, in a certain sense, poisons.

Our main design, however, refers to the cases in which poisonous doses (in the ordinary acceptation) have been taken, not only without fatal result, but with the effect of curing the patient of alarming disease.

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ART. 10.—*On the absorption of Tartar Emetic and the Elimination of the Antimony by the Urine.* By M. M. MILLAN & LAVERAN. (Translated for the Western Lancet, from the Comptes Rendus des Seances de d'Acad. des Sc. Paris, 15th September, 1845.)

At the session of the 12th of August, we had the honor to submit to the Academy some researches on the absorption of medicines, and on their elimination by the urine. Since this first labor, we have been in the same path of observation, hoping to discover some useful indications, by ascertaining, day by day, as far as medical observation and chemical analysis would permit, the transformations which medicinal substances undergo, the physiological circumstances of their absorption, and the time and duration of their elimination by the urine.

We now present the results which we have obtained, by applying this method to the administration of tartar emetic. We will detach from the mass of our labors a particular fact which is presented in the relations of the organism with this medicine. A fact which involves, particularly, an important point in toxicological researches.

In a numerous series of observations in which our patients

have taken, once or twice almost, the ordinary dose of tartar emetic, of one *decigramme** or rarely of three *decigrammes*, we first discovered that the antimony was always to be detected in the urine. The elimination of the metal was tardy in several cases; and we were induced to watch its passage into the urine, not only several days after its ingestion, but even several days after it had ceased to show itself in that excretion. We have thus observed the antimony to re-appear, follow a real intermittance in its elimination, and remain in the animal economy, for a length of time altogether unexpected.

The cure of our patients and their discharge from the hospital, prevented us from giving the absolute time during which the antimony may remain fixed in the organs of the body. Nevertheless, in two patients, we have discovered it twenty-four days after its administration. One of these patients, having died of protracted phthisis, retained some metalic antimony, which was detected in his liver by chemical analysis. We find, on our record of experiments, one case in which the antimony has been detected in the urine after twenty days; two other cases after nineteen days, and three cases after sixteen, seventeen and eighteen days.

Desirous to facilitate the researches, to which these facts may prompt, we will indicate the process which we employed to ascertain the presence of the antimony. We add 10 cubic *centimetres*† of pure fuming hydrocholoric acid to one *decilitre* of urine;‡ we stir the two liquids together with a small flattened piece of clean tin, which is allowed to remain in the acidulated urine. The tin is blackened at the end of some hours, if the antimony is abundant; but it is necessary to wait three or four days when the quantity is small. The ordinary temperature is sufficient, but the deposit is made more quickly when the weather is warm. A new piece of tin should be employed for each new experiment.

The intermissions which are observed in the elimination of antimony, are longer in proportion as the period increases from the time of administration. The interval, which does not exceed one, two, or three days, in the beginning, becomes six or seven

* About a grain and a half.

† The superficial centimetre is nearly 4-10 of an inch.

‡ About 6 cubic inches.

days, after the lapse of eight or ten days from the time of ingestion. The sojourn of the antimony is also sensibly prolonged when the dose is repeated two or three times. It was under these circumstances that we detected the metal after twenty-four days. To what limits may it not arrive when the organs have received arsenic, which, according to all the toxicologists, is eliminated much more slowly than antimony?—and when, instead of a small dose, repeated twice at most, the quantity of the poison is large and the dose often repeated?

The fact of the intermission has fixed our attention; we are not without hopes of establishing extensive relations between the intermittent progress of the elimination of this metal, and the parallel intermittent course of many, frequent, phenomena in pathology, which are yet very obscure. But it can only be after repeated observations of all the facts attending the passage of antimony into the economy and its elimination, that this discussion can be commenced. P.

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## MISCELLANEOUS.

96 *South Eleventh-street,*
*November 13th,* 1845.

Dear Sir,—You have asked me to give you some account of the facilities afforded at the present time for studying medicine in Paris; my best way of informing you upon this subject, is to give you a brief account of the twelve months which I have recently spent there myself.

The medical student in Paris begins the day at a hospital. Although by a rule of the "Bureau Central" the professors are required to commence their visits at six o'clock, A. M., in summer, and at seven o'clock, A. M., in winter, few of them are at their posts before eight o'clock.

Velpeau, who is the most popular surgeon in Paris, has generally a class of from twenty to fifty students, who follow him through the wards; he is from an hour to an hour and half in making his visit. Velpeau says very little at the bedside; he there questions the patient, and examines his disease, but reserves all remarks for his lecture, which takes place immediately after the visit, in a small room adjoining his wards.

Owing to the number who follow this surgeon, it is impossible for many to receive much instruction during the *visit*, and this

must be at the expense of a degree of pushing and scrambling which I have never seen practised at any hospital in this country.

Velpeau delivers his lecture with great distinctness, and for this reason American students are first taken to his wards by their countrymen. He begins by an account of those patients who have left the wards; he then speaks of the arrivals, and afterwards of any disease which may suggest itself, and finally of any operation or operations which he is about to perform. His operations always take place after the lecture. At ten o'clock he has finished his duties at the hospital. He gives a lecture at La Charité every day except Thursday.

Chomel, who stands in the first rank among the physicians, lectures three times a week at Hôtel Dieu, from November until April. During the remainder of the year Rostan has his chair. Both of these, but especially the latter, make many observations at the bedside, and their visits and lectures are exceedingly instructive; but the crowd is always a drawback. Besides these there are a number of other lectures at various hospitals; Lisfranc and Berard, surgeons at la Pitié, and Piorry, a physician, at that hospital. Gilbert and Devergie on diseases of the skin, at Saint Louis; Trousseau on the diseases of children; at Neckar; Civiale on calculous affections at the same hospital; and Ricord at Midi, &c. &c. All of these say much at the bedside, and a great deal of information may be obtained at their cliniques; but some of the lecturers waste their time, and that of their hearers, by abusing each other. Lisfranc, for example, never misses an occasion to express his antipathy for, and to ridicule Velpeau, for which the latter frequently retaliates.

When the morning lectures are out, (i. e. about 10½ o'clock,) the students breakfast at one of the cafés in the neighborhood of the hospital; after this, those who are studying the rudiments of medicine go to the school; but this institution is very little frequented by Americans, who generally devote themselves to clinical studies. Between eleven and four o'clock, a number of private courses are given upon various medical subjects, some of them by agrégés of the faculty. These are held in different places, generally, in the neighborhood of the school. I will give you a list of those which I attended. Cazeaux on obstetrics, Sichel on the diseases of the eye, Desmanes on the same, Barth on pathological anatomy, Louget on the nervous system and on vivisections, and Ripbail on bandaging. But the great attraction which Paris formerly held out was the afternoon courses. Some of the internes at the hospitals were men of much experience, and of very industrious habits, and they enjoyed opportunities for studying the interesting cases which were withheld from persons not connected with the hospital. It was the custom for some of these internes to form a class of five or six foreigners, and pay a

visit to the wards during the afternoon. An opportunity was thus afforded for any one to examine the cases at leisure, and practice himself in diagnosis, while the interne recapitulated any observations which the professor had made; and added any others with which his experience furnished him. But unfortunately all this is at an end. Last January, Orfila, the Dean of the Faculty, and the managers of the hospitals, put a stop to these private courses. The reason assigned for this was, that such repeated examination was injurious and cruel to the patients. But those internes who were engaged in the business said that the real opposition was on the part of their fellow internes, and arose from their jealousy.

While I was in Paris, I took one course on auscultation at Beaujon, in the service of Louis; two on surgery at La Charité in the service of Velpeau; and two at this hospital, in Rayer's service. Besides these, I had a course on the diseases of the skin, at Saint Louis. in the service of Devergie; one at the Children's Hospital, in the service of Baudeloque; and one at St. Lazarre, on syphilis in women, and the exploration of the diseases of the neck of the uterus, by means of the speculum, and their treatment. St. Lazarre is not only a prison, but also an infirmary for those women who have venereal affections, but who are not on the register of the police.

These afternoon lectures ceased last January, much to the regret of all the foreigners, and if this privilege be not again granted, Paris has in my opinion lost its great charm for the American student.

I must recur again to the lectures in the middle of the day, to say that there are some subjects of which the professors make a speciality, which are not taught to any great extent in this country, viz.: The minute anatomy of tho nervous system, and vivisections by Louget; pathological anatomy by Barth, and the diseases of the eye by Sichel, Desmanes, &c. &c. I must add the *touch* as applied to obstetric cases, and taught publicly by Dubois and Cazeaux. I omitted to say in the proper place that a large class followed Dubois in his visits to the wards of the "Clinique" of the school of medicine; and that the whole operation of labor and delivery may be witnessed by as many students as have tickets of admission to the clinique. These may be obtained by showing a diploma. The first four students who arrive in the delivery ward after labor begins, have the privilege of conducting the labor, in which no attempt is made to avoid exposure.

I have swelled this letter to a length which I never intended; but I cannot close without saying something about dissecting. All dissections in Paris are carried on in two places; the Ecole Pratique, which is close to the school, and Clamart, about two miles distant. The latter is probably the largest, cleanest, and best ventilated establishment of the kind in the world. The price of subjects varies with the season, but is generally from

two to five francs. Lectures upon operations take place, and students may practice operating after the first of April; but this is forbidden before that time.

Whilst I was there I passed three months in the cabinet of the prosector to the faculty, M. Richet; I employed two of these in dissecting, and the other in operations. Any other information which I have upon these matters is freely yours.

With much esteem I remain, &c.,
ALEXANDER WILCOX.

Prof. R. M. HUSTON. *Med. Examiner.*

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*Diseased Potatoes.*—The following remarks from Mr. Herapath, a distinguished English chemist, are worthy of notice:

"My attention has been given to the disease which has shown itself so extensively amongst the growing potatoes. I find, in almost every instance that the epidermis of the stalk *below* the surface of the ground is more or less in a state of decay, often disintegrated, and completely rotten; the leaves and branches accord with the state of that part of the stalk below the ground. The tuber, beneath the outer skin, is first spotted brown, (like a bruised apple): these spots extend and penetrate towards the centre, quite changing the nature of the potato. Those near the surface are most injured; in some cases the lowest on the root are not at all affected, while the upper ones are useless. I should therefore expect that the longer the crop remains in the land, the greater the injury will be. It seems, from the microscopic appearances, that the starch escapes injury for a long time after the skin and cellular parts are gone; and as the whole of the nutritive powers of the potato reside in the starch, I should recommend that wherever the disease has shown itself to any extent, the crop should be dug, whether ripe or not, and the starch extracted by the following simple process:—After washing the roots, let them be rasped fine, and thrown into a large tub or other vessel; pour a considerable quantity of water, and well agitate and rub the pulp with the hands; all the starch or fecula will, from its great weight, fall to the bottom, while the skin and fibrous matter will be carried away by the water; wash the starch with one or two more waters, allowing it to fall after each washing; spread it upon cloths in a warm room to dry—in this way about twenty or twenty-one pounds will be obtained from every one hundred pounds of potatoes, and will contain as much nourishment as the original roots; it will keep any length of time, and may be used with flour to make bread, pies, puddings, &c., as well as farinaceous spoon-meat. This is much better than throwing away the diseased roots, and will furnish food for tens of thousands who might otherwise want it."—*Med. News, Phila.*

# THE WESTERN LANCET.

LEXINGTON, JANUARY, 1846.

## TRANSYLVANIA SUMMER SCHOOL OF MEDICINE.

A course of lectures will be given in the Medical Department of Transylvania University, embracing the time between the 2d Monday of April and the 15th of October, with the exception of a recess in the hot weather. There will be fourteen lectures in each week, on the following topics:

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| Fevers and Medical Jurisprudence, - - | by Prof. MITCHELL. |
| Medical Chemistry and Hygiene, - - - | by Prof. PETER. |
| Surgery and Surgical Anatomy, - - - | by Prof. BUSH. |
| Diseases of the Chest and General Pathology, | by Prof. LAWSON. |
| Comparative Anatomy, - - - - - | by E. L. DUDLEY, M. D. |
| Obstetrics and Diseases of Women and Children, | by JNO. T. LEWIS, M. D. |
| Materia Medica and Dietetics, - - - | by JNO. R. ALLEN, M. D. |

The fee for the course will be FORTY DOLLARS, and will be required in every case, IN ADVANCE; it will entitle its holder to the use of the library, containing nearly 8,000 volumes, during the whole course.

The reader will discover, on a careful examination of the above schedule, that a full course of lectures will be given in Transylvania, in the coming recess. We call the special attention of pupils who wish to graduate in the spring of 1847, to this arrangement. They will have to prepare Inaugural Dissertations, as part of the qualifications for being candidates. In no place in the whole Union, can this be done to greater advantage than in Lexington, while the Summer Course is in progress. The vast and varied Library of the Institution will be at their service, and will furnish the most ample references that can be desired. And if the pupil be in the incipient stage of study, he will have abundant time for perusing the best works in all the departments of medicine; and can make vastly better progress by blending a careful course of reading with attendance on two lectures per day, than is practicable under any other circumstances.

To the above considerations we add, that if the Summer Class be desirous of Clinical instructions at the Hospital, and of studying practical Anatomy in detail, in the Dissecting rooms, these advantages can be had at a trifling cost.

The teachers in the Summer Course of Lectures, in order to make their instructions as useful as possible, will devote a considerable part of the time to recapitulation by question and answer; and the drawings, plates, models, figures and other articles belonging to the Institution will be constantly employed to subserve the same end.

The members of the Summer Class will also have an opportunity of witnessing of Surgical operations, in private practice.

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*To the Physicians and Meteorological Observers of the Valley of the Mississippi and the Lakes.*—The undersigned, having at last become engaged in the composition of a systematic treatise on the physical condition and diseases of the region between the Gulf of Mexico and the Northern Lakes, for which he has been collecting materials by travel, respectfully requests the physicians and scientific gentlemen, who, in his personal interviews with them, promised to assist him with facts, to forward them, by mail at his expense, or by private opportunity. Post mortem examinations, remarkable cases, and histories of epidemics of all kinds, will be acceptable. In short, any well observed and well recorded fact, going to illustrate the causes, symptoms, or treatment of any of our diseases, will be gratefully received. As the morbid appearance in those who have died of our autumnal fevers, have been but imperfectly set forth, in any published accounts, he is extremely desirous of receiving cases of dissection of that kind. He is likewise anxious to obtain accounts of the typhoid fever, and the erysipelatous fever, which, for the last few years, have prevailed in various parts of the West and South.

As he will aim at giving a fuller account of the climate of this region than has hitherto been published, he asks for meteorogical observations, from all observers, both in and out of the profession. Those who have published abstracts, will please to send them, and those who have not, will greatly oblige him, and give additional value to their labors, by furnishing him with manuscript tabular views, presenting monthly extremes and means of temperature and pressure; the courses of the winds reduced to eight points of the compass; the proportion of clear and cloudy days; the dew point, and the quantity of rain.

He would also be pleased to receive an accurate notice of the times, in the ensuing spring, when the following plants begin to

unfold their leaves and flowers, and when the latter are full blown:—The peach tree, (*Amygdalus Persica*)—white flowering locust, (*Robinia pseudacacia*)—dogwood, (*Cornus Florida*)—and cotton wood, (*Populas angulata.*) In every case a number of individual trees should be observed, and the aspect of the spot, in reference to the sun, recorded. He wishes the meteorological observations to come down to the end of the present year, 1845—those of a later date he would not be able to use.

As to the time when his work will be ready for the press, the undersigned cannot at present speak with certainty; but all the causes which prevented his laboring upon it, having been overcome, and considerable progress in its composition made, he begins to look forward to its completion at no distant day.

That this notice may the more effectually reach those to whom it is directed, the undersigned would respectfully ask its insertion in those medical Journals which exchange with the Western.

DANIEL DRAKE, M. D.

*Medical Institute of Louisville,*
December 1st, 1845.

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*Stockton's Dental Intelligencer.*—This is a spirited, and so far as we are capable of judging, a high toned and useful periodical. We have often been surprised to observe the very few journals, Dental or Medical, patronized by Dentists. This we are satisfied is a defect; and as periodicals devoted to that department multiply, it is hoped that the evil referred to will be remedied. Dr. Stockton's journal is published in Philadelphia, in monthly numbers, at *one dollar* per annum.

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*Antagonism of Malarial Fevers and Phthisis.*—A writer in the *Boston Med. and Surg. Journal*, reiterates the opinion, now very generally entertained by the profession, that phthisis and malarial fevers are incompatible. This writer remarks, that in the State of Illinois, where malarial fevers prevail, consumption is comparatively rare; but that when fevers are not common, there phthisis is more prevalent.

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*Works of Hippocrates and Galen.*—Dr. JOHN REDMAN COXE, of Philadelphia, has prepared an epitome of the works of Hippocrates and Galen, which he proposes to publish, provided 500 subscribers can be obtained. They will be comprised in two or three volumes of 500 pages each, at about $3 per volume.

*Color of the Hair Restored.*—Dr. Sykes records a case in the *St. Louis Med. and Surg. Journal*, in which the color of the hair has been restored, in a man 81 years old. The beard has also beceme black, and his sight has been measurably restored.

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*Effects of Salicine.*—Dr. Fenner, one of the Editors of the *New Orleans Medical Journal*, has satisfied himself by repeated trials, that Salicine is greatly inferior to Quinine in the cure of intermittent fever. It frequently arrested the disease; but it also often failed when the Quinine subsequently succeeded.

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*Schools in Lunatic Asylums.*—We believe the time is not far distant when these will be common in all Institutions for the cure of the Insane, and be considered as among the most important of remedial measures. In the Report of the Royal Hospital of Bethlem for 1844, we find the following remarks on this subject: *Journal of Insanity.*

"The education of the insane, has been attempted in some Asylums and with considerable success; and it is worth inquiry, how far instructions could be introduced with advantage into Bethlem Hospital; first as an obvious benefit to those instructed, but chiefly as a source of occupation to well educated patients. In the principal French Hospitals and in some of the best conducted public Asylums in this country, schools have been established with the best possible results: faculties which have been long dormant have been aroused, the memory improved, fresh objects of interest created for fixing the wandering mind, and luring it away from distempered fancies."

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## OBITUARY.

Dr. James Johnson, long known as the Editor of the Medico-Chirurgical Review, died at Brighton, on the 9th of October last, in the sixty-ninth year of his age.

# THE WESTERN LANCET.

VOL. 4. LEXINGTON, FEBRUARY, 1846. NO. 10.

## PATHOLOGY AND PRACTICAL MEDICINE.

ART. 1.—*Remarks on Typhoid Fever, as it appeared in Jefferson county, Alabama.* By JOSEPH R. SMITH, M. D., of Elyton, Alabama.

In the latter part of August, 1845, there appeared a fever in this village, which was marked by some peculiarities entirely different from anything before observed in this part of the country.

To call it *Typhus*, according to Armstrong, would be incorrect, both in language and logic; althongh that able writer, in his last writing, seems to have abandoned his former notions in regard to typhus fever.

The fever which visited this village last August, and continued until the middle of October, was entirely different from any description I had before seen; at least it was so in its more prominent symptoms. The nearest that any cases have approached it were related in the Lancet for August 1845. Though in that description there was a lack of some very important symptoms, which I found to attend almost without an exception, in the fever which prevailed at this place.

This fever might (if ever a distinction was necessary,) be called *Typhoid.* I have ever been opposed to mere names without a proper regard to symptoms. Satisfied as I am, that Nosology has done much to impede the progress of medical science, I shall ever think it the duty, both of the author and professor, to exert their best efforts to impress upon the student the necessity of paying strict regard to symptoms, wholly regardless of names.

This fever was usually preceded for several days by slight chilly sensations,—pain in the head, back, and inferior extremeties; great indisposition to mental or coporeal exertion; furred tongue; pulse, in some cases, very slow, not more than 80 beats in the minute. This slowness of the pulse attended in all cases of males over 30 years of age,—of which age there were but three cases. In every case of females, the pulse was unusually quick and irregular. The proportion of sick was greatest among young females, aged from 14 to 16 years. There did not, in my practice, occur but one single case in a female over 20 years of age.

After the third or fouth day, there was general *malaise*, great dispositition to sleep, and if waked, would desire to be left alone and not disturbed;—great dilitation of the pupil. This dilitation of the pupil and great disposition to sleep, was present only in cases of patients under 12 years of age. There was also with females and young males some delirium; tinitus aurium, and great disposition to sleep; but when roused would seem to be rational. These symptoms usually continued through the evening and greater part of the night. In the morning the patient would be less hot and less disposed to sleep; though the pulse was still as frequent as ever, and the thirst for cold drinks appeared to be greater of a morning than any part of the day. When the patient drank fluids, they would strike the stomach with a rumbling kind of noise, as if poured into an empty vessel, showing great inactivity of that organ. As the disease advanced the stupor became more apparent; the teeth and lips covered with a brown incrustation which readily peeled off by the application of a little weak ley; again the tongue would become coated in the centre with a very dark fur, at the same time, the edges would appear natural.

About the seventh day, the tongue lost this brown or black coat; and when this cleaning of the tongue did take place, the symptoms (as in Bilious fever,) were not in the least moderated. This cleaning of the tongue on the seventh day, was looked to by me, after the first few cases, with much anxiety. In every case under 12 years of age, where the tongue cleaned as early as the seventh day, the symptoms were much aggravated; the dark brown coat being exchanged for a very smooth shining red tongue,—which would seem to indicate great gastric inflammation. It was very remarkable, that in no case was there any

epigastric tenderness, though the tongue was as red as ever. Broussais saw it. Nor were there any other symptoms of inflammation in the stomach, with the exception of great desire for cold drinks. Armstrong has observed several instances in which the subacute species of inflammation commenced and continued, in Typus, without pain or tenderness. He further says, this redness of the tongue must be attended to by directing attention to the stomach and intestines, that it is not inflammation, but an irritation, which may run into inflammation. He fails to advise what course to pursue in such cases.

This redness of the tongue does not (or did not in the fever which prevailed here,) denote either inflammation or irritation, for the reason that almost every symptom of gastric or intestinal inflammation was absent. For this opinion, I have high authority, besides my own experience.

Dr. Stokes says, that "in typhus, the tongue is not a correct index of the state of the intestinal canal." He further says, "you will often see in the advanced stage of fever, a red, dry, and chopped tongue, become moist, pale, and smooth, under the use of wine, carb. ammonia, and other stimulants.

In this fever, I found that the tongue was no index to the condition of the stomach. I entirely failed in restoring the tongue to a moist, pale, and smooth appearance, by the use of stimulants, as advised by Dr. Stokes. There was another peculiarity of the tongue, that appeared in the fever, viz: a perfectly smooth, natural appearance, after the fourteenth day. This condition of the tongue obtained in two cases, both over thirty years of age. In these cases, after the fourteenth day, the tongue cleaned off perfectly smooth and natural; and so remained, notwithstanding the fever did not abate until the thirtieth day. Dr. Stokes has seen the tongue continue natural throughout the whole course of typhus fever.

This was the first time I had ever seen the tongue continue naturl for fourteen days, and the patient laboring under fever the whole time.

This, I think, cannot happen in cases of bilious fever, since they run their course much sooner than typhoid, and terminate in seven or nine days, either favorably or fatally. This may appear like wincing at critical days, and as far as my observation

extends, every fever is more apt to terminate on certain days than others. In Bilious fever, I have particularly observed the seventh and ninth to be the days of termination, just in proportion to the severity of the attack.

In the present fever, not one single case recovered under the thirtieth day, after the fever first developed itself. Neither has a single case proved fatal after the fourteenth day. In most cases, the fourteenth day appeared to be about the time for a crisis. It was marked, in some cases, by an amelioration of every symptom, less of thirst, less of that burning heat about the surface,—pupil becoming more natural. In two cases the crisis was marked by a chill, and this was the only chill that either of these patients had, either during the progress or forming stage of the disease.

There was one patient who suffered extremely, from the first seven days, with a severe pain in the right knee and toes on the right foot, also the right hand and wrist; the parts appeared to be swolen somewhat, and quite red in the course of the tendons. Deafness attended in some few cases, and continued until convalescence began; this deafness occurred in the worst cases only.

In some few cases, this fever was marked by symptoms of intermittent billious fever only.

*Treatment.*—I can say but little in relation to the treatment of this fever, not having found one course more successful than another. The first three or four cases were treated with calomel, opium, quinine, and blisters; all of which appeared to have not much effect in interrupting the course of the fever, with the exception of the blisters. From the application of blisters, in some cases, I found much benefit.

During the first two days, the administration of emetics effected much; not so much merely by emptying the stomach of any offending ingesta, as by the general concussion they afforded the system, together with, or tending towards, diaphoresis. After the operation of the emetics, I generally gave a blue pill, instead of calomel; the latter having previously failed in my hands, in similar cases, to produce the desired effect. In fact, I thought the calomel injurious when continued too long; my reason for so thinking was, that, during the first week of the prevalence of this fever, I endeavored to produce the constitutional effect of this medicine on a certain patient, without accomplishing my object—

the patient growing continually worse. This, to some, might appear a flimsy pretext for abandoning the use of so important a therapeutical agent as calomel; but it, with others, entirely satisfied me of the inadmissibility of calomel in typhoid fever.

Quinine, I also found to effect nothing, unless perseveringly used in large doses, and that too, before the seventh day. After the seventh day, I found quinine of no avail, neither in small, nor large doses.

If any class of remedies had the advantage over another, after the seventh day, it was that of diaphoretics. In no case where diaphoresis was effected, were the symptoms half so severe. Nevertheless, every case, unless relieved before the eighth day, continued thirty.

To open the bowels, I used oil, senna tea, and magnesia, with epsom salts. In no case were the bowels unusually constipated, but entirely under the influence of mild laxatives. I commonly gave two or three blue pills, every second or third night; influenced by the necessity of the case.

Blisters to the stomach and nape of the neck, in some cases, produced a happy effect; they never failed to relieve delirium or pain in the head or stomach, as the case might be. I tried, in two cases, the endermic use of quinine; from this, I anticipated much benefit, having frequently used it in bilious fever, in the above form. I had also heard the distinguished Professor of Materia Medica, in Transylvania, speak in the highest terms of the endermic use of quinine. In these two cases, I could perceive no good whatever. In fact, almost every medicine failed to produce its accustomed therapeutical effect; at the same time, acting as they would upon a healthy person; for instance, quinine would produce ringing in the ears, and effect the circulation, without checking the periodicity of the fever. Calomel, by the assistance of purgatives, would act upon the bowels, producing dark, green, consistent discharges, without, in the least, producing any favorable result in the symptoms. The only benefit derived from any medicine, or class of medicines, was from diaphoretics.

Though it may be possible that, had I not have used blue pills, assisted by other purgatives, I might have been more unsuccessful; as for that, I will leave others to judge.

*Remarks.*—The history of every epidemic is important to the profession; and we feel inclined to record every fact bearing on the prevalence of fever in our country. We are fully satisfied, and almost every paper published on this subject tends to confirm the opinion, that we are still much in the dark in relation to the pathology and essential characters of our fevers. The preceding history, presents several interesting features, and hence, we lay it before the public; we are not satisfied, however, from the author's description, that it was truly *typhoid fever.* We regret to say, that the term typhoid, is often used somewhat vaguely; entirely different significations being attached to it by different writers. Some use it to signify a typhoid *state* of the system—a condition that any disease may pass into; others use it in its legitmate sense, restricting the term to a form of fever differing from all others prevalent in our country. Remittent fever often assumes a *typhoid grade;* and this is especially the case in some epidemics; but the disease should not be denominated typhoid fever. It is to that form of fever described by Louis, and others, and which is unquestionably met with in our country, that we would restrict the term *typhoid.*—EDITOR.

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ART. 2.—*A Case of Purpura Hæmorrhagica.* By SAMUEL W. RITCHEY, M. D., of Newtown, Indiana.

In the month of July, 1845, Mr. R——, two miles from this place, had an attack of remittent fever; which, in a few days, yielded to the ordinary treatment of that disease. But before he had acquired his accustomed health, he was seized with a hæmorrhage from the mouth and anus, at which time I was summoned to see him. The bleeding commenced before day, while he was asleep. When he awoke, he found his pillow covered with blood, and it was still running slowly, but constantly, from his mouth. As there was neither cough, hacking, nausea, nor vomiting, I suspected the blood came from the fauces or mouth, and not from the lungs or stomach, as was judged by his friends: and upon opening the mouth, it was discovered that the inner surface of the cheeks, the roof of the mouth, palate, and tongue, were covered with maculæ, some of which were bleeding freely, others

had nearly ceased to bleed, and others still, were not yet ready to pour out blood. The patient said "he could feel great lumps rise in his mouth, which, in a short time, would be gone again." This, no doubt, was the case. Each maculæ was full of blood, and until it had accumulated to such a degree, as to burst the delicate membrane covering it, he could "feel the lumps," after which, "in a very short time," truly, "it would be gone again;" and thus the bleeding was kept up by the rising and breaking of those blood-blisters for about one week. Considerable quantities of blood were discharged by stool for three or four days. The arms, neck, legs, and every part examined, (except perhaps, the face,) were completely covered with maculæ of various forms, and differing in size, from a line to an inch or more in diameter. All of those spots were at first florid, and afterwards became purple, or brownish, and in about two weeks, entirely disappeared. Mr. R—— had a fever, with a yellowish coat upon the tongue, (where it was not occupied with the maculæ above described,) full, rather hard, and preternatuarally frequent pulse; skin hot and dry; some uneasiness in the breast; pains in the abdomen, &c., which continued unabated, for four or five days, when it put on an intermittent type; and two or three days after this, it abated.

*Treatment.*—In the first place, he was bled about sixteen ounces; (blood coagulated readily,) a mercurial purgative was administered, which operated well; after which, the bowels were kept moving three or four times a day, by Castor Oil and Spts. Turp., through the whole course of the disease. Sugar of Lead was tried, but seemed to have little or no control over the hæmorrhage. Large doses of Nit. Potas. were then administered, which seemed to check the bleeding by reducing the fever. This was continued till the fever changed its type, after which, the Sul. quinine, and red pepper tea were freely administered, for two days, when the fever was subdued, the hæmorrhage ceased, and the patient recovered as speedily as is common after an attack of ordinary fever.

The preceding is a simple statement of the leading facts of this case; I leave others to speculate upon the active or passive character of this bleeding; and upon the pathology of hæmorrhages in general. This case, however, seemed to be of an active character.

## ART. 3.—*Prognosis in Typhoid Fever.* By M. ROSTAN.

(Gazette des Hopitaux, Jan. 1845.)

[The typhoid fever of the French and the typhus of this country, if not essentially distinct diseases, are at the least, there is reason to believe, distinct varieties of the same species. Certain it it is that we shall look in vain in the continued fevers of Great Britain for that peculiar affection ot the intestinal glands which forms so prominent a feature in the continental disease, and the constancy of which may well excuse the opinion held by many French pathologists, that typhoid fever is essentially a gastro-enteritis. It is no part, however, of this portion of the present work to enter into those controversial discussions, of which the subject of fever has at all times been so fertile a source; we merely allude to a point which necessarily involves a difference of opinion, in order to remind our readers that in the following observations the author refers to that form of the disease in which the abdominal complication plays an important part:]—

The prognosis in typhoid fever is always discouraging, even in the mildest forms of the complaint. The danger is in all cases proportionate to the age of the subject, being *cætris paribus* greater in the old than the young. Sex appears to exercise but little influence over the mortality of the malady; neither does climate produce any marked modification in the severity of its symptoms. It is always necessary in forming our prognosis to take the constitutional power of the patient into the account. A feeble constitution is always unfavorable; but it must be allowed, nevertheless, that we have frequently seen the robust more rapidly cut off by the fever than the weakly.

Mental distress and grief are among the most injurious circumstances to which a fever patient can be exposed. This was distinctly seen during the years 1814 and 1816, when the hospitals were crowded by sick soldiers who were rapidly destroyed under the depression consequent upon defeat. We have continually seen those patients sink who were harassed by the fear of death, while others less timid as constantly recovered. Excesses of all kinds are likewise unfavorable to the patient.

As regards the progress of the disease;—we have noticed that when typhiod fever passes rapidly through its different stages or periods, it is in a majority of cases apt to be fatal. Notwithstanding, a fever which at the onset is marked by alarming symptoms, may occasionally become sensibly ameliorated in the respect of danger.

The character of the local symptoms affords a most useful means of arriving at a correct prognosis; for instance, the predominance of cerebral symptoms declares the existence of a dangerous form of the disease; experience having shown that

cerebral symptoms are present in a large proportion of fatal cases. The asthenic form of fever has also very commonly an unfavorable termination.

Delirium occurring early in this disease is more dangerous than when it happens later; it is also to be feared in proportion to its violence and duration. A certain value is justly attached also to the state of the tongue—for this organ to be dry and furred is a bad omen, but when in addition to this it becomes brown or black, the disease in the majority of instances proves fatal. When, on the contrary, the tongue is but little altered, or remains moist; or if, having become dry, it again becomes moist—it is either a sign of amendment, or indicates a mild form of fever. It is necessary in estimating the state of the tongue to notice whether or not the patient sleeps with the mouth open.

Vomiting is an unpleasant symptom, especially in the latter stages of the fever; it is of less consequence in the commencement. As regards the state of the bowels, some physicians look upon constipation with more alarm than diarrhœa. We are not of this opinion, but, on the contrary, regard an obstinate and continual purging as one of the worst symptoms which can arise.

Retention and dribbling of the urine during the course of typhus fever are bad signs, as these symptoms indicate extreme debility: so likewise are starting of the tendons and coma, for it is seldom that a patient recovers after their appearance. Among the most fatal signs we would also enumerate deafness, rapid emaciation, and the facies hippocratica.

A pulse of 120 is a symptom which ought not to be lightly regarded, especially in the later stages of the complaint. It is rare that a patient recovers when the pulse has reached 140.

There are other circumstances which are to be considered as complications of this fever, and which must materially influence the nature of our prognosis; for instance, the occurrence of pneumonic or gangrenous sloughs on the sacrum, must render our opinion unfavorable. There is one symptom which, although it is considered to be critical by some, we consider to be almost inevitably of fatal augury; we allude to inflammation and swelling of the parotid glands. Our prognosis should also be cautious when one or more abcesses occur in the cellular tissue of the limbs, or other parts of the body.—*Ranking's Abstract.*

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ART. 4.—*Distinctive characters of Remittent, Typhoid, and Typhus Fevers.*

Nosological classifications of fevers, and the nomenclature of this class of diseases, have been as mutable as the numerous theories respecting the intimate pathological perversions consti-

tuting the febrile state. *Inflammatory*, *putrid*, *adynamic*, *bilious*, *yellow*, *jail*, *nervous*, *malignant*, *petechial*, *congestive*, *ataxic*, *gastro-enterite*, and a host of other names have been at different times, and by different writers, employed to distinguish forms of this disease, their applicatiou being based upon circumstances ascertained or imagined, appertaining to their origin, location, peculiar complications, or visible appearances. It is easy to raise objections to each of these appellations, and, indeed, so long as the essential pathology of the febrile state remains unknown, so long will any arrangemeut and nomenclature be liable to be overturned and rendered obsolete by the ever-changing results of progressive, pathological investigations. The distinction between periodic and continued fevers, being founded on obvious facts, has been retained for a long time, and will probably be permanent; but the different varieties of the latter are still subjects of discussion, and the occasion of much difference of doctrine. The term *typhus* has been in use ever since the time of Hippocrates, to denote a variety of fever characterized by peculiar conditions of the mind and general powers, which are expressed in its etymology. From its appropriateness and long use, it is not probable that this term will be soon abandoned: moreover, modern investigations have shown that the variety of the disease which it is intended to express is very distinctively marked, not only by the cerebral symptoms and general prostration, but by other and peculiar phenomena. Heretofore its application was not so well defined as it is now. By Armstrong, whose writings until lately were deemed of the highest authority, its latitude was extended so as to embrace, by qualifying adjectives, a great proportion of the cases of continued fever. It has now become more limited, embracing only a variety distinguished by peculiar symptoms, attended by a constant exanthema, and especially involving, as its remote cause, (in addition to contagion or infection) concentrated animal effluvia. It is exceedingly rare that an orportunity presents itself for witnessing specimens of true Typhus in this locality. It has fallen under the writer's observation in two well-marked instances, only, during the last ten years. In one of these it occurred in the family of an Irish emigrant who had recently arrived in this country. One of three children had been effected and died with it on their passage. The other two were attacked on their arrival in this place. The other instance occurred at the alms-house near thts city in the winter of 1840–41. Four cases transpired there in quick succession, under circumstances which rendered it almost certain that the origin of the disease was due to the malaria engendered by close congregation of the inmates of the house in unventilated apartments. These cases were reported for the Boston Med. and Surg. Journal, June 1841.

The term *typhoid*, as applied to distinguish a certain class of

fevers, is of recent date, and is not recognized in this sense by all pathologists. It originated with Louis, of Paris, whose researches into the history and comparative phenomena of the fevers of the Parisian hospitals, may be said to have created a new era for this department of pathological science, and will remain an imperishable monument of unsparing industry, and professional zeal. The investigations of this truth-loving, talented pathologist, in themselves of great value, are still more valuable as furnishing a new point of departure, and giving impulse to a movement, which has enlisted the efforts of a multitude of co-laborers in different countries. Louis ascertained that the fevers of Paris were allied to each other by a certain uniformity of lesions, the most constant of which were disorganization of the glands of Peyer; and a softened condition of the spleen. The same disease, by those who believe it in fact a local affection, of which the febrile symptoms are symptomatic, has been entitled *Dothin-enterite* or *follicular enteritis*. After these minute and comprehensive investigations in France, it became an interesting and important point of inquiry, in how far the same form of fever prevails in other countries. The attention of Pathologists was soon directed to this point. In the British Islands it was found that in some cases of the, there so called, typhus fever, the descriptions of Louis were applicable, and in others they were not. Thence, it appears to be the prevailing opinion of British writers that the Typhus and Typhiod forms of fever are identical, but presented under different modifications. They do not generally acknowledge typhoid fever as a distinct form of the disease. In our country it has been ascertained by Jackson, Hale, Shattuck, and others of Boston, that the fever indigenous in New England, and known there as the common-continued, or autumnal fever, presents, in the phenomena before and after death, an entire similarity to the typhoid fever as portrayed by Louis. Gerhard of Philadelphia, has also described a fever indigenous in that locality, identical with the typhoid; and, also, an epidemic typhus, which he traced to importation from England by means of the English immigrants arriving there, in which the characteristic symptoms and lesions of typhoid fever were absent. He regards the two forms of fever as distinctly seperable; and having had abundant opportunities to study the disease as it presents itself abroad and at home, his opinions are entitled to great consideration. Nevertheless, it is by no means regarded as settled by pathologists of this country, that the two forms of disease are intrinsically distinct. It is still a question *sub-judice* whether they are not one and the same disease, presented at different times and places under different modifications. While there is much weight of authority for the negative of this question, the numerical vote, we imagine, would be in favor of the affirmative.

We have extended these remarks farther than we intended

when we commenced writing. Without entering into the controversial question just referred to, it had occurred to us that it would be acceptable to our readers to present a brief synopsis of the distinctive characters appertaining to the forms of fever distinguished as TYPHUS and TYPHOID, and also, those which belong to the common REMITTENT fever, as distinguished from both of the preceding. Whether we accept the doctrine which makes a specific distinction between the two forms, or that which regards them as varieties of the same species, there can be no doubt that the distinctions exist, and it is, to say the least, convenient to indicate this fact by different terms. The fever which generally prevails in this locality, is the common-remittent, or, as it is miscalled, *bilious* fever. But there is reason to suppose that sporadic cases of Typhoid fever occasionally occur, and we are liable, at any time, to meet with this, or undoubted typhus in an epidemic form: Under these circumstances, it appears to us that there will be an advantage in having a synoptical view of these several forms of this disease which will admit of easy reference.

CHARACTERS DISTINGUISHING REMITTENT AND TYPHOID FEVER.

*Typhoid.*—Access is gradual: a week or more with podromic symptoms.

*Remittent.*—Access is generally sudden.

*Typhoid.*—Characterized by prostration and stupor ("typhoid symptoms") early in the disease.

*Remittent.*—The symptoms commonly called 'typhoid,' do not occur until quite late in the diseuse.

*Typhoid.*—Seldom a distinct chill, but only chilly sensations, which do not recur with periodicity.

*Remittent.*—Chills generally pronounced, and apt to recur several times with observance of periodicity.

*Typhoid.*—Diarrhœa one of the most constant symptoms; occurs early, and is apt to continue. Meteorism is generally present.

*Remittent.*—Diarrhœa only an occasional symptom. Meteorism of less frequent occurrence.

*Typhoid.*—Sordes of mouth; with low muttering delirium early in the disease.

*Remittent.*—These symptoms are not found until the latter part of the disease, and very often absent.

*Typhoid.*—Attacks subjects, almost invariably, under 30 years of age.

*Remittent.*—Shows no such discrimination.

*Typhoid.*—Cough and Expectoration (Bronchitis) are generally prominent symptoms.

*Remittent.*—Of much less frequency.

*Typhoid.*—Rose, or red spots (*taehes rouges*) occur over abdomen and breast, from the 8th to the 15th day.

*Remittent.*—Absent.

*Typhoid.*—Tongue is brown and dark.

*Remittent.*—Generally yellowish white. Nausea and vomiting are characteristic of its early stage; while they are less prominent, and often absent in Typhoid. The conjunctiva is frequently yellow, and the urine impregnated with bile. The skin is apt to be yellow or sallow. These symptoms do not occur in Typhoid. The mind also, in Remittents, is frequently unaffected; very rarely so in Typhoid.

*Typhoid.*—Subsultus frequently present.

*Remittent.*—Rarely.

*Typhoid.*—Occurs rarely before November, sometimes in the latter part of October.

*Remittent.*—Occurs especially in August and September: unfrequent in October, and rarely afterward.

*Typhoid.*—Contagious and infectious.

*Remittent.*—No evidence that it is either.

*Typhoid.*—Presents after death disease of the Elliptical Plates, or Peyers glands, the mesenteric ganglions, and softening of spleen.

*Remittent.*—Spleen may be softened. The other lesions mentioned, rare. Stomach and Liver almost invariably evince disease. (Stewardson.) A fact which often enables us to confirm our diagnosis of remittent fever at its close, or after the case has terminated, is this: It is very apt to resolve itself into an intermittent form; and, in a very large proportion of cases, individuals who have had remittent fever, experience an attack of intermittent within a twelve month after their recovery. This fact may, also, serve to correct a diagnosis of Typhoid fever if it has been incorrectly made.

### CHARACTERS DISTINGUISHING TYPHUS AND TYPHOID FEVERS.

The following is an abstract of the diagnostic symptoms distinguishing the two forms of fever above mentioned, presented by Dr. Gerhard, in his lecture on the subject, published in connection with the lectures of Dr. Graves, of Dublin. The descriptions are abbreviated as much as practicable. He classes the symptoms under four heads.

### CEREBRAL AND NERVOUS SYMPTOMS.

*Typhoid.*—Loss of strength and prostration very early in the disease. Singing in ears, Vertigo, Epistaxis. Pains in head and limbs not so violent as in intermittent and remittent fevers.—Chilliness, but not defined chill. Brain symptoms increased slowly. Delirium rarely entirely wanting; sometimes only at night.

*Typhus.*—Stupor prominent from the first. Patient becomes

comatose at an early period. Delirium always of the still, muttering kind.

OF THE SKIN.

*Typhoid.*—Rose spots fewer in number, often only six or eight; rarely more than 30; rather larger, elliptical, and more elevated.

*Typhus.*—Exanthema extends over the whole body. Papulæ are rounded, varying in size from an imperceptible point to breadth of a line. Occurs on the 3d day. May continue 12 or 14 days—generally only 5.

ABDOMINAL ORGANS.

*Typhoid.*—Diarrhœa after a few days, a frequent, but not invariable symptom. Meteorism, or abdominal pains generally present.

*Typhus.*—These symptoms not present excepting as rare and accidental complications. Thirst more marked.

THORACIC SYMPTOMS.

*Typhoid.*—Some congestion of smaller bronchial tubes, which may pass into bronchitis, or pneumonitis.

*Typhus.*—Congestion different: apparently more dependent on the state of the blood, which obeys the law of gravitation—the dependent part always full of blood. Pulse more frequent. Eye more dull, heavy, and blood-shot.

He states the following general circumstances:

Typhus spares no age; prevails as an epidemic, extending by contagion, or direct propagation from an infected individual.

Typhoid, rarely assumes this character; rarely epidemic, and scarcely infectious, *excepting when prevailing epidemically.*

The medical physiognomy is very diagnostic, but difficult to described.

To these it is to be added that the characteristic intestinal lesion of Typhoid fever, or, to use the language of Louis, its anatomical character, while it is essential to constitute this disease, is an infrequent complication only, in Typhus.

In view of the acknowledged ability of Dr. Gerhard as a pathologist, his extensive and peculiar opportunities for clinical observation, and the fact that he has advocated the doctrine of an essential distinction between these two forms of fever, it seems fair to conclude that he would submit as strong a contrast of diagnostic symptoms as will comport with a rigid adherance to an exact description of phenomena. The practical reader will perhaps be enabled from the preceding comparison to form an opinion whether the antithetic characters are sufficient to constitute a radical distinction, or whether they are not of so kindred a nature as to denote the same disease under somewhat different aspects. For our own part, we incline to the latter view, although we admit that the circumstances indicated, enable the

practitioner to determine in most cases, without much trouble, whether the disease be more appropriately—agreeably to this classification—called typhus, or typhoid; and that it is convenient and useful to make the distinction. In short, while all must acknowledge that they are in nearness of kin,—cousin-germans—we are disposed to regard them as even more closely allied to each other, being, if not one and the same individual, at least pathological twin-brothers.—*Buffalo Med. Journal.*

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ART. 4.—*On the frequent spontaneous Cure of Pulmonary Consumption, and the indications furnished by Pathology for its rational treatment.* By D. H. BENNETT, M. D., F. R. S. E., &c.

[The experience of every day tends more and more to the belief that, although we are not as yet able so to arrange our remedial agents as to bring about so desirable an event in a given case, the cure of pulmonary tubercles is not by any means so rare as is generally supposed. Pathological examinations continually reveal appearances which can only be referred to the former existence of tubercular deposit, and which no symptoms during life had given reason to suspect. The present paper, from the pen of a gentlemen already favorably known to the profession, is an endeavour to deduce a rational mode of treatment from what appears to be the proceedings of nature in certain cases; and under the conviction that it is only by philosophical investigation, such as the present, and not by the charlatanerie with which every honorable mind has lately been disgusted, that we shall ever advance towards the successful treatment of phthisis, we shall condense the following paper as little as is consistent with the plan of this work.]

Every one who has been much accustomed to make post-mortem examinations, must occasionally have noticed puckerings or contractions in the substance of the lungs, sometimes conjoined externally with white cicatrices, sometimes with cretaceous or calcareous concretions. It is certain, from the frequency with which these appearances are met with, that, if they indicate the previous existence of tubercle, this lesion must not only heal spontaneously in a few cases, but must be a very frequent occurrence. This will appear to be the case from the following statement:—

Of 73 bodies which the author examined since last November, he found puckerings or concretions in 28: in 12 of these, induration alone coexisted; in 16, calcareous concretions were also present.

In 100 bodies examined by M. Rogeè,* at the Salpêtriére, these lesions were discovered in 51, or more than half. M. Boudet† also states, that of 135 bodies examined by him he found them in 116, or in about four-fifths of the whole.

In 28 cases first alluded to, 3 were of the age of 18; 6 between that age and 40; and 19 above the latter age. There can be little doubt that they are most common in elderly individuals who have escaped the diseases incidental to youth.

It may be well, before we proceed further, to inquire whether the lesions now alluded to, are really proofs of cured tubercular deposits in the lungs. This seems to be established by the following facts:—

1. A form of indurated and circumscribed tubercle is frequently met with, gritty to the touch, which, when dried, closely resembles cretaceous concretions.

2. The concretions are found exactly in the same site as tubercle; they are most common in the apex, in both lungs.

3. When a lung is the seat of tubercular infiltration throughout—recent tubercle occupying the inferior portion, and older tubercle, and perharps caverns, the superior—the cretaceous and calcareous concretions will be found at the apex.

4. A comparison of the opposite lungs will frequently show, that whilst on one side there is firm encysted tubercle, partly transformed into cretaceous matter, that on the other the transformation is perfect.

5. The puckerings found without these concretions exactly resemble those in which the latter exist. Moreover, whilst puckerings with gray induration may be found in the apex of one lung, a puckering surrounding a concretion may be found in the apex of the other.

6. The seat of cicatrices admits of the same exceptions as the seat of tubercles. In one case the author found the puckerings in the inferior lobe only; he has also met with three cases in which the lower lobe was densely infiltrated with tubercle, the superior being only slightly affected.

Hitherto these lesions have been considered as occurring very seldom. Laennec only records six cases; Andral, eight; and various writers have published isolated cases as remarkable for their rarity. Dr. Williams* speaks of these appearances as *now* and *then* and *sometimes* occurring. Such is the general belief.

On the other hand, the observations of Rogee and Boudet, confirmed by those of the author, will probably serve to show that this spontaneous cure of tubercle has occurred in from one third to one half of all who die after forty.

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* Archives Generales de Medicine, vol. v. 1839.

† Comptes Rendus, tom. vi. 1843.

*Diseases of the Chest, 4th Edit., p. 192.

This result may with some excite surprise as being contrary to the prevailing opinion; but it is easy to show that there is nothing in the chemical constitution of tubercle which differs from lymph in the early stages, only in containing more albumen, and as the latter forms a superabundance of earthy salts,—that should in any way oppose the facts revealed by morbid anatomy.

Tubercle is not malignant. Gulliver and Vogel, it is true, have described it as composed of nucleated cells, but, after careful examination, the author has never been able to discover such a formation. On this point the observations of Lebert more nearly agree with those of the author, which have always shown that tubercle is composed of granules, and corpuscles of irregular shape, difficult to be described; but easily recognized by an experienced eye.

Then with regard to the action upon which tubercular deposition depends, two opinions have been contended for. By some, it is maintained to be a constitutional disease; by others, to be the product of inflammation. Great names are ranged on either side. A moment's consideration will show that the whole discussion turns upon what is meant by inflammation. If by that term be understood pain, heat, redness, &c., then tubercle is not inflammatory. If, on the other hand, we consider that the essential phenomenon of inflammation is an increased exudation of blood-plasma, then tubercle must be regarded as an inflammatory product.

What then, we ask, constitutes the difference between the products of ordinary inflammation and tubercle? It is the comparatively inorganizable power of the latter. In tubercle, we have granules and imperfect cells; in the products of healthy inflammation, we have granules and perfect cells. Both these morbid products are formed by the exudation of the blood-plasma. If it undergoes transformation into perfect organism, it constitutes what pathologists have in some cases called the results of inflammation, in others, different kinds of tumors. If the transformation be arrested or rendered imperfect, it forms what has been called tubercle or scrofulous deposits. The essential distinction, then, between the products of inflammation and tubercle, must be sought for in a difference of composition. (chemical and vital) of the blood-plasma. Hitherto chemistry has not taught us in what this difference consists, but has pointed out the probability of its consisting of some form of proteine less capable of organization than fibrine. The deficiency of organization is readily seen under the microscope.

The fact, then, of the frequent spontaneous cure of tubercle may be admitted. Laennec, Andral, Cruveilhier, Rogee, Boudet, &c., have each published cases where all the physical signs of

the disease, even in its advanced stage, have existed, the patient, nevertheless, dying after many years of another disorder, and in which puckerings and concretions were found after death. Boudet states that in one year he met with fourteen cases where softening of tubercular matter in a cavern was evident, all traces of which subsequently disappeared. So deeply rooted, however, is the opinion of the necessarily fatal nature of this disease, that simply, because recovery has taken place in certain cases, medical men have rather mistrusted their own diagnosis, than ventured to oppose a dogma of universal belief.

The treatment of pulmonary consumption has for the most part been empirical: one remedy after another has failed, because no one remedy can be of use in a disease which, from its commencement to its termination presents such different characters and indications. These characters and indications are only to be ascertained by a practised ausculator, and the signs which guide his practice are totally inapplicable to others who cannot distinguish them. Empirical means having failed to accomplish a cure, perhaps a study of the method in which nature operates may be more successful. The facts which have been brought forward at various times hold every encouragement for prosecuting a rational treatment of the disease, based on its general pathology. For this purpose, a knowledge of the progressive march of tubercular depositions, is of primary importance.

At first, tubercle is deposited in a fluid state from the capillaries, in the same manner as lymph. The miliary and infiltrated forms, whether gray or yellow, after a time soften—a process which may commence at any part of the mass and gradually involve the whole. The parenchyma of the lung, or the pleura in the immediate neighborhood of such deposition, is more or less inflamed. The pleura especially obtains a thickness unknown in other diseases, so much so as in some instances to acquire a cartilaginous hardness, and to form a complete capsule all around the tubercular deposit. This capsule is often so firm as not to collapse when the tubercular matter is evacuated, so as to leave a cavity. When further tuberculization is checked, and the powers of the system are sufficiently entire, this cavity contracts, its walls unite or close upon the tubercle, which has undergone the transformation presently to be described, and a cicatrix is formed.

Cicatrices present different appearances accordingly as the cavity from which they are formed is superficial or deep-seated. In the first case, adhesion takes place between the pleura, and the summit of the lung is drawn close to the thoracic walls. More frequently, however, the cavity is deeper, in which case the walls of the cavity contract inwards, producing a puckering of the external surface.

Sometimes no traces of tubercular matter are to be found either within or in the vicinity of these cicatrices. More generally, however, the reverse will be found to be the case. Occasionally the tubercular matter exist in round encysted masses, of a composition containing an abundance of earthy salts and crystals of cholesterine. Sometimes the greater portion is absorbed, leaving only a residue; at others, the whole is converted into a solid calcareous mass. This may remain an indefinite time, or may be evacuated with the sputa. In the latter case, the walls of the cyst contract into a dense linear cicatrix.

If, then, no further deposition of tubercle take place, there is no reason why this process, which is the analogue of that which takes place in ordinary abscess, should not occur as frequently as the healing of ulcers and abscesses in other internal organs. To accomplish this, we must overcome the pathological conditions upon which the deposition of tubercle depends. These are, *first*, a morbid state of the blood; and secondly, local inflammation, by means of which an unhealthy exudation is poured out, which takes the form of scrofulous or tubercular matter.

The indications for treatment, therefore, are, first, to overcome the dyspepsia and acidity of the alimentary canal; secondly, to furnish the material necessary for the formation of healthy chyle; and thirdly, to combat the local inflammation.

The principal difficulty in the treatment will be found to consist in removing at the same time, general imperfect nutrition, and debility, and the local inflammation, and the irritability depending upon it.

The dyspeptic symptoms are sometimes to be alleviated by naphtha, when all other ordinary means have failed. The boasted good effects of this remedy are, I think, attributable to its great power in allaying irritability of the stomach, and thus enabling the patient to take nourishment.

The imperfect nutrition will be best overcome by an easy digestible and nutritious diet; milk, substances which abound in oleaginous rather than albuminous principles, and an equable warm climate, whereby an excess of oxygen may be diminished. In following the second indication, I can now, after four years' experience, stongly recommend the cod-liver oil as a most valuable remedy.

The local inflammation must be combated by topical bleeding and counter-irritation. Some of these remedies are of course more valuable than others, and all require tact, guided by a perfect knowledge of the physical changes which take place in the lungs. The treatment must also be modified according to the stage of the disease.

Whatever opinions may be held, however, with respect to the value of the treatment proposed, it will, perhaps, be conceded,

that the facts now brought forward are sufficiently important to warrant new trials, directed rather to the curative than to the palliative treatment, which is now so prevalent.—*Ranking's Abstract.*

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ART. 5.—*On the Treatment of Epilepsy.* By E. BLACKMORE, M. D., Edinb., Physician to the Bath Penitentiary.

"In all cases, in the paroxysm, whether there be turgescence of the vessels of the head, or pallor and coldness of the face, in the delicate and in the robust, in the recent and in the confirmed disease, the cold affusion is propably the best remedy; if bleeding be practised, it should be far less extensive than in apoplexy; when excessive, it has only been the means of substituting one form of convulsion for another, or of inducing worse consequences. In that form of the disease which is caused by a stroke of lightning, or sun-stroke, or from a large quantity of spirituous liquors taken at a draught, experience shows that the best treatment consists of cold water affusion, followed by an emetic and ammonia, as soon as the power of swallowing has been recovered; bleeding in such cases has been fatal. Besides the cold douche, a clyster of turpentine is alone required in most cases. Compression of the carotids has also been found useful.

"In the intervals of the fits, the most generally curative treatment, in a vast number of cases which I have seen in practice, has been the antiphlogistic, either evacuant or sedative. Small bleedings and cupping, shortly before the period of the return of the paroxysms, has had a most salutary effect; while profuse bleeding has served to make the returns more frequent.

"Purgatives are especially valuable, e. g., elaterium and croton oil. I have given also, with good effect, a scruple dose of calomel. In relaxed habits a combination of colocynth with the gum resin of cornel has succeeded well. The oil of turpentine is a most useful adjunct in these cases to castor oil.

"Emetics, particularly sea-sickness, have appeared safe and wholesome. Drains, such as the issue by incision on the occiput, are of an unquestionable utility in most cases.

"Sedatives, as colchicum and digitalis, have been found successful; but when incautiously given, productive of equal mischief.

"In many cases of chronic epilepsy; the most successful treatment is not evacuant or sedative, but tonic,—not that tonic plan which fills the vessels with blood, but that which increases their contraction, and equalizes the general circulation. Of this class, the more successful in my experience is turpentine in small repeated doses; the sulphates of copper and zinc, and nitrate of silver,

appear to act in a similar manner to turpentine, but not so efficaciously.

"When the fits have usually recurred in the night, the habit has been broken by opiate given at bed-time and by the patient being awakened and caused to leave the bed.

"*Concubitus rite et legitime peractus* has proved a remedy, just as its abuse has been one of the worst excitants of the malady."—*Ibid.*

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ART. 6.—*On certain Pathological conditions of Milk as the cause of disease in Infants.*

M. ALBERT DONNE, in his *Cours de Microscopie*, (Paris, 1844, p. 412,) observes, "Our ignorance in the present day with regard to the characters of good and bad milk in nurses, and the mode of distinguishing that which possesses qualities requisite for the life and health of the child, from that which only affords to it an unwholesome kind of food, is so great, that it is almost impossible to find a practitioner, nurse, or even chemist, capable of giving an opinion whether a given specimen of milk be of good or bad quality. The indifference with which this important question is regarded, is no doubt in great measure attributable to the difficulty of the subject, to the insufficiency of the results which chemical analyses have hitherto afforded, and to the want of a proper method in the examination of this substance. We cannot in reality attribute it to any lack of interest, or to the trifling importance of the question, for there is perhaps none which in a higher degree concerns the public health, the happiness and welfare of families, or which more frequently presents itself for solution; and I have no hesitation in stating, that all which has hitherto been said and written on the subject of milk, so far at least as regards its peculiar qualities in relation to the nourishment of infants, is absolutely valueless. No one, certainly, is likely to be deceived by the color, consistence, or even the taste of milk; yet nothing can be more vague than are such characters; it is impossible to attach any real value to them; and since they are based on nothing positive, each person may interpret them as he pleases; consequently the attention of medical men is directed much rather to the general health of nurses than to the properties of their milk; and the examination of this secretion, if undertaken, is performed merely as a matter of form. Undoubtedly the general health is an indispensable condition, and one to which especial attention ought to be directed in the selection of a nurse; yet this condition is far from being the only one deserving of considera-

tion, and it is well known that the best health is not always a guarantee for the good qualities of a nurse, or the nutritive properties of her milk; the lacteal secretion may be insufficient, or abnormal, in a woman otherwise perfectly healthy. Is it not a matter of daily observation, that one woman, although of a meagre sickly appearance, makes a better nurse than another woman of the healthiest aspect; and are we not frequently deceived as to the state of the constitution by external appearances? It is evident that the organs endowed with the function of secreting milk are, so to speak, placed too much without the general economy, to allow of the qualities of this secretion being estimated by the integrity of other organs and the regularity of other functions. It is the milk itself, therefore, that we must search for the characters of its good and bad qualities; and until we possess the means of observing its properties, and its good or bad nature in relation to the nourishment of infants, practice will be deprived of rule, the choice of nurses will be made in an empirical manner, and the determination of mothers who wish to suckle will more frequently be regulated by chance or caprice, than by reason, or with a due regard to the interest of their children." The subject has recently attracted the attention of M. Girard, who has furnished the following cases and observations.

*Archives Generales de Medicine, June*, 1845.

Case I.—In September, 1840, a child, aged five months, was brought to me. I was informed that it was strong and vigorous when born, and that it was at once delivered to the charge of a nurse, who had been suckling for fourteen months. It shortly became uneasy, cried incessantly, and was only quiet when at the breast; it gradually grew thin, and diarrhœa was established, the stools being of a green color. When brought to me it presented the following condition: Its face was thin and pale, tongue red, with a few scattered aphthous points; belly tense; there was a bright erythematous redness over the thighs and nates; there was frequent diarrhœa, the stools green; vomiting of curdled milk several times a day; the child slept badly, frequently awaking. This was the third time the child had been attacked with an almost similar set of symptoms, except that the aphthous spots now appeared for the first time, and the attack generally was more severe than the former ones, which had disappeared under the use of the baths, starch injections, and abstinence from food; the diarrhœa, however, had continued. Baths, injections, gargles were now in vain made use of; the diarrhœa obstinately remained, and the aphthous spots increased. The nurse's milk was very alkaline; it was not examined microscopically. Since the child did not mend, it was determined to change its milk, and a nurse was engaged who had only been suckling for three months. The beneficial effects of this change were very marked; in two

days the diarrhœa had considerably abated, and after a week all the symptoms finally disappeared.

Case II.—Madame S., aged 25, was on the 14th of November, 1844, delivered of her first child, a male, strong and well formed; she suckled this child for ten days, at which time her breasts becoming enlarged and painful, a nurse was engaged. This nurse was a middle-sized, dark-complexioned woman, about 30 years of age. She had no appearance of disease; her breasts were small; her milk was sweet, of good color, consistence, and quantity, and about three weeks old. The child when delivered to her charge was in good condition, and its evacuations healthy; but in a few days its sleep became disturbed; it grew thin; its stools became liquid, and very frequent, sometimes green, at others black; it had nausea and vomiting; a bright redness extended over the thighs and nates, and the child beeame very restless. On the 4d of December it presented the following appearances: emaciation extreme; skin dry and rough; diarrhœa frequent; stools green: the belly tense and painful; extensive erythema over the surface of the body; some vesicles on the scrotum; constant vomiting after taking the least quantity of liquid or milk; tongue red, and, as well as the mucous membrane lining the lips and cheeks, covered with numerous aphthous spots. I prescribed bran baths, water containing white of egg for drink, injections of linseed infusion with a drop of laudanum twice daily, and poultices to the abdomen. In spite of this treatment, however, the symptoms became more intense, the erythema extended, the aphthous spots became more confluent, ecthymatous pustules formed on the legs, the diarrhœa became more frequent, and and the emaciation increased. This state of things continued until the 9th of December, when the nurse's milk was examined microseopically by M. Duforsé, and the following results obtained:—There was nothing peculiar in its color; its consistence was that of milk containing much cream; treated with ammonia it became slightly viscous; it was neither acid nor alkaline. When a drop of this milk was examined with a microscope magnifying 300 diameters, it was observed, 1st, that the milk globules were in great abundance, such as is found to be the case in very rich milk; they were generally of a considerable size, and the largest resembled small bladders half filled with liquid, and collapsed. Instead of having a pearl-like brilliancy, most of them, especially the large ones, were of a dull white color, somewhat resembling opal; some of them, aggregated together, formed small groups, which could be moved about in all directions, without a single globule being detached. When submitted to slight pressure, these several groups spread so as to occupy a surface five or six times greater than they presented at first, and they assume various forms. The smallest quantity of sulphuric ether introduced between the

plates of glass dissolved a large quantity of them very rapidly. 2d. The field of the microscope was beset with roundish granular particles, perfectly colorless, and presenting all the characters described by J. Henlé, Donné, Mandl, Guterbrok, and other micographers.

[To these particles Donné first applied the name of *corps granulex*, and describes them as invariably existing in colostrum, but disappearing gradually as the milk becomes older; so that after about the twentieth day, and usually much sooner, not a trace of them is to be found. They differ from ordinary milk globules (with which they co-exist,) in form, size, general aspect, and internal composition. They are not always globular, but present all possible varieties of form, and also of size, the smallest being about one-hundredth of a millimetre, the largest many times this size; they are slightly transparont, usually of a yellowish color, and of a granular aspect, appearing as if composed of a number of small granules aggregated together, or enclosed within a transparent envelop. Very often there exists in the centre or some other point of these little heaps a single globule, which is apparently nothing but a true milk globule imprisoned within the granular matter. The nature of these granular bodies is unknown; Donné supposes that they consist of fatty matter, and a peculiar mucous substance: they are not soluble in alkalies, but like true milk globules dissolve in ether, and after the evaporation of this reagent small heaps of acicular crystals remain on the glass. (*Cors de Microscopie*, par Alb. Donné, p. 400.) Although the existence of these granular bodies is commonly peculiar to colostrum alone, yet Donné (page 421,) observes that they and the other peculiarities of the colostrum (as the large irregular size of the milk globules, which, instead of floating free, are agglomerated together into small masses,) may persist for many months, or even to the end of suckling. The existence of this condition can only be discovered by the microscope, for the ordinary physical properties of milk, such as its whiteness, consistence, and other characters, are preserved; and the nurse may continue in perfect health: the child, however, usually grows thin, although it is continually at the breast, and it commonly becomes attacked with diarrhœa. The milk in this case of M. Girard seems to have retained many of the characters peculiar to colostrum; he thus continues the narration of it:]—

The propriety changing the nurse was now suggested and adopted; the milk of several was examined microscopically, and one selected whose milk appeared perfectly pure. This change had scarcely been effected two days, when the diarrhœa and vomiting diminished, and speedily ceased altogether; the aphthous spots disappeared, the tongue resumed its natural color, and the erythema faded. From this time the child speedily recovered

its good looks, and became fat, its stools being natural, and sleep good.

CASE III.—Madame R., aged 28, was delivered of her seventh child in February, 1842; a male, strong, and well formed. One of her children had died when six months old from an affection characterized by ardent thirst, extreme emaciation, diarrhœa, with green stools, and glairy vomiting. The present child took the breast, and was apparently in good health, yet vomited occasionally after suckling; the milk to all appearance was perfectly good. About the beginning of the second month the vomitings increased in frequency. Supposing that the child filled its stomach too full, the breast was given to it less frequently, and a little *eau sucree* substituted, yet after each time of taking the breast it still vomited, though it could retain other liquids: it soon grew thin and pale, and its bowels were alternately constipated and relaxed.

Towards the middle of the second month, the following symptoms suddenly occurred: the child screamed out, ceased to breathe, and became unconscious, its face and hands assuming a livid hue: this condition lasted for a few seconds, and then passed off spontaneously leaving the child weak and faint for some hours.—Within the next twenty days the child had many similar attacks, which came on at uncertain periods, both day and night, without any obvious cause: blisters, antispasmodics, and baths were employed, but without benefit. The vomiting still continued. The milk was now examined microscopically several times, at intervals of some days, and was found to present an enormous quantity of mucus without any other alteration. I informed the mother that it was essential the child should have other milk; this was repugnant to her, and she requested a few days' delay. Eight days afterwards, the vomitings having diminished, the milk was again examined, and presented a diminution in the quantity of mucus; but it again increased after a few days, and with this increase the vomitings returned as before. The child continued to grow thin; a little diarrhœa showed itself, and the chest affection remained. The mother, now becoming alarmed, consented to employ a nurse: the milk of seven different women who successively offered themselves, although to all appearance good, presented beneath the microscope either mucus granular bodies, or other alterations; therefore they were rejected. At length one was obtained whose milk microscopically was perfectly pure. Two days after taking this milk the vomitings entirely ceased, so also did the symptoms of asthma, and neither of them ever reappeared; the child speedily became fat, strong, and well, and remains so to the present time.

At the conclusion of these cases, M. Girard remarks, that "without wishing to generalize too much, or to establish a theory from a few facts, is it not, however, logical to observe here a re-

lation of cause and effect? What do we see in the second case? A severe and frequently fatal affection, which was rapidly on the increase, had resisted all rational means adopted for its removal, and which yielded with the greatest facility to a change in the milk with which the child was fed. We observe this disease to coincide with the ingestion of milk impure and of bad quality, and we witness its disappearance with a truly marvelous rapidity so soon as milk of good quality is administered. And in the third case, although the symptoms were somewhat different, yet we observe them to occur coincidently with the ingestion of impure milk, and to cease when milk of a pure quality is substituted. Is it unreasonable to conclude that certain severe pathological conditions may be produced by alterations in the milk alone, and may be dissipated even when they have attained a very high degree, by a return to milk of good quality? It would be a point of much importance to ascertain whether these alterations in the condition of milk could at any time coincide with the maintenance of perfect health in the child; also, it would be important to determine, if possible, whether a given alteration in milk most commonly or constantly induces such or such a pathological affection. Thus of the two cases last narrated we observe that in one a granular state of the milk induced an aphthous affection (the muguet,) whilst in the other, a mucous condition gave rise to symptoms referable to the stomach and to the lungs; at any rate that these states were coincident with such affections. Of course it is not meant to be here implied that the pathology of infants is entirely under the influence of milk, but it seems probable that many hitherto inexplicable conditions may be so, and, moreover, that they might be explained by a simple examination of this liquid."—*London Med. Gaz.*, Oct., 1845.

## SURGERY.

ART. 7.—*Hæmorrhage caused by inefficient Compression.* By E. L. DUDLEY, M. D., Demonstrator of Anatomy in Transylvania University.

The following case illustrates a valuable principle in Surgery, and one which has been recognized and taught by Prof. DUDLEY for many years. It relates to the influence of inefficient mechanical pressure in exciting a hæmorrhagic tendency in wounded parts.

On the 16th of December, 1845, Professor DUDLEY removed the left testicle of a negro man, æt. 40. The operation was attended with more than ordinary violence to the tissues surrounding the organ, because of the intimate adhesions established between them by repeated inflammation. The immediate hæmorrhage was inconsiderable, and all the bleeding vessels were secured by ligatures. The only dressing applied consisted of a light pledget of cotton cloth secured by a T bandage. Two hours after the patient was removed to his room, I was summoned to his assistance, and found that he was bleeding copiously from the upper portion of the wound, and that the scrotum was distended to an enormous extent by the blood which had accumulated within, in consequence of the adhesion of the pledget to the lips of the wound. I removed the dressings, and discovered, after having removed the immense coagulum which filled the scrotum, that the bleeding proceeded from the entire inner surface of the sac. Under the influence of warm water, poured over the part, the vessels contracted so as to check the hæmorrhage. I inserted a large pledget into the upper portion of the cavity in order to keep the incision open, and to permit the escape of blood that might afterwards ooze from the wounded structure. The loss of blood was so great as to produce blindness and vertigo, the patient being unable to sit up for a moment without a threat of syncope.

On the succeeding day, a recurrence of the hæmorrhage rendered it necessary to remove the dressings a second time, and I found that notwithstanding the precaution of the previous dress-

ing, a large coagulum had formed in the most dependant part of the scrotum, and the bleeding evidently proceeded from the parts directly in contact with and pressed upon by the coagulum. The wound was thoroughly cleansed and the incision stretched apart as much as possible. The hæmorrhage ceased instantly after the removal of the clotted blood. No dressing whatever was applied after this, until all danger of bleeding had passed, and the progress of the case was uninterruptedly favorable.

The same principle was exhibited in a case upon which Prof. D. operated last spring. After the excision of the disorganized mamma of a very fleshy woman, æt. about 35, the wound was dressed with strips of adhesive plaster, and a pledget laid over these to receive the blood. In a few hours the patient became alarmed in consequence of a gush of blood from the wound, and I was requested to visit her. The lips of the incision were drawn so completely together as to prevent the exit of the blood which oozed from the minute vessels, and the gradual accummulation of the fluid by dilating and pressing upon the yielding structure surrounding it, had excited the wounded capillaries to such an extent as to produce a considerable hæmorrhage. This instantly ceased when I removed the pledget and pressed the fluid out of the cavity. The only precaution afterwards observed, was to preserve an outlet through the wound.

The peculiar anatomical position of the palmar arteries, and the great difficulty of compressing them effectually, enable us to account for the embarrassment which is encountered in attempts to check hæmorrhage from those vessels by compression. The ulnar and radial vessels, placed above the flat surfaces of their respective bones, may be controlled without difficulty. A clot of blood in the womb excites hæmorrhage of that organ, and the greater the accummulation of blood, the more profuse is the supply. This principle embodies a powerful argument against the use of the plug to restrain uterine hæmorrhage. If the walls of this organ were undilatable, bleeding might be checked by means of the tampon with as much certainty as epistaxis by closing the anterior and posterior nares. But its soft and yielding character, and the facility with which it enlarges under the influence of concealed hæmorrhage, offer a ready and practical solution of the inefficacy and the absolute danger of the plug.

ART. 8.—*Case of Sloughing of the Scrotum produced by injection to cure Hydrocele.* Reported by E. L. DUDLEY, M. D., etc.

Mr. B——, visited Professor DUDLEY in January, 1845, under the apprehension that he would necessarily lose one of his testicles. He had been the subject of hydrocele, and was operated upon by the method of injection, several weeks before his visit to Lexington. A high degree of inflammation was excited by the stimulating injection which was thrown into the cavity, and finally all the anterior and lateral walls of the scrotum, on one side, sloughed, leaving the testicle completely denuded. The portion of scrotum remaining attached to the epididymis was about as broad as the thumb nail, and, in its inflamed and thickened condition, did not seem to be one-third large enough to cover the organ. The sensibility of the gland was so much blunted that it was freely handled without pain to the patient. Prof. D. dressed the parts with the bandage, and after the expiration of a week, the swelling in the fragment of scrotum being very much reduced, the edges were, at every succeeding dressing, drawn up around the organ, and in six or eight weeks had completely enclosed it.

While the operation of injection is universally popular, and is recommended by all modern authorities as the most simple, least painful, and free from those secondary misfortunes to which others are liable, it is well for such cases as the above to be recorded. That it often fails to effect a cure is not denied by its advocates. It is not to be rationally presumed that the encysted form of the disease can be successfully treated by this method.

LARREY testifies to the dangerous consequences that he observed to follow the injection of alcoholic fluids into the scrotum. The case of Mr. B. is not a solitary instance in Prof. Dudley's experience of the misfortune's resulting from the practice. M. Larrey found its effects so painful and hazardous that he was induced to abandon the injection. I have seen numbers of cases operated upon by Prof. D., and have never known a result similar to the preceding.

The parts being laid open by a free incision, which produces but slight and temporary pain, the condition of the interior can be carefully examined. A number of small cysts are frequently found about the body of the gland or epididymis, which must be destroyed in order to prevent a return of the disease. These

cysts cannot be approached with the trocar, even if their existence can be ascertained in any other way than by exposing them.

A clergyman was under Professor Dudley's charge, some years since, who reported that he had previously been under the treatment of thirteen physicians, eleven of whom had operated upon him by tapping and injection. I have never known more than one instance wherein the operation of incision, as performed by Prof. Dudley, failed to effect a conclusive cure. In that case the lint was thrown from the wound, soon after the patient was put to bed, and the inflammation was of a character so indolent as to render the success of the operation doubtful.

Prof. D. has cured many cases of symptomatic hydrocele without an operation, simply by restoring the general health and vigor of his patients.

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ART. 9.—*A brief history of the treatment of two cases of Strangulated Hernia.* By R. J. SPURR, M. D.

Early in my professional career, I was called to visit a negro man, the property of one of my neighbors, who I learned had been the subject of hernia for some years, and had been in the habit of wearing a truss for some time. In lifting a heavy weight, a few hours before I was called to see him, his bowels were protruded until a tumor as large as the two fists was formed in the scrotum.

The first thing which drew my attention upon visiting this patient, some three or four hours after the occurrence of the accident, was the extreme agony to which he was subjected. Lying upon the floor, tossing from side to side, writhing in almost every possible contortion, with the knees generally drawn nearly to the chin, and almost a continued effort at vomiting.

Upon an examination, I found the case to be scrotal hernia, the tumor large, sensitive, and as tense as a drum head; the tumor in the inguinal canal apparently three-fourths of an inch in diameter, and as hard as a bit of wood. This being the first case which had occurred in my practice, it was first treated with a medium degree of energy, by moderate venesection, nauseants,

the warm bath, the taxis, &c. In due time, finding no benefit from my means, I determined to press them as far as possible, feeling satisfied that a sufficiency of time had not elasped to cause such adhesion as would prevent the return of the protruded parts; and also, that violent spasmodic action, in all the parts concerned, alone prevented my success. Then relaxation—profound relaxation—must be induced. To effect this object, I commenced the administration of tartar emetic in doses of four or five grains, repeated every eight or ten minutes. A tub of warm water was also prepared, in which the patient was seated; the tub being of sufficient height that when the patient was placed in it, the edge coming up under the hams, brought the front of the thighs nearly in contact with the abdomen, thus giving by this posture as much assistance as practicable towards the relaxation of the abdominal parietes; the patient being held in this position by proper assistance.

So soon as I found he was becoming nauseated, I opened a vein in each arm, pressing the tartar emetic freely; and by the time he had lost thirty ounces of blood, I found that it required no assistance to keep him in the tub; he was evidently becoming much easier, the tumor was not so sensitive, nor so tense; large drops of sweat began to cover the surface, the head to droop to one side; in fact, to use a homely expression, he might be said to be wilting down, so great was the relaxation. Upon examining the tumor at this time, it was found to be soft, a slight pressure upon it created a gurgling sensation, and almost as quick as thought it returned into the abdomen.

Every thing being now suspended, and a cup of strong table tea given, the patient soon rallied, expressing himself as feeling entirely relieved, and in a few days he was at work.

The second case occurred in the practice of a neighboring physician, by whom I was invited to see it. I found it to be similar in its history and character to the former; occurring in a stout negro man who had previously been subject to this accident. An attempt was made to relieve him by what would ordinarily be considered energetic treatment, but it was of no avail.

My friend who was in attendance upon the case, now proposed an operation, as being the only course that seemed likely to be successful. I asked permission to press the relaxing effort to the

extreme which I had previously pursued, which being granted, he was treated in what might be considered a rashly energetic manner, precisely similar to the former, and with the happiest result. I suppose that there was administered, to each of these patients, from thirty to forty grains of tartar emetic during their treatment, which was probably less than an hour, producing little or no vomiting; in the first case, in which there was an almost constant effort of vomiting when first seen, it was entirely quieted upon the administration of two or the portions of the medicine.

These cases are reported simply for the benefit of the junior members of the profession; to induce them at once to use, in similar cases, energetic means to surmount the difficulty, and not lose time, which is truly precious, in temporizing means. I am satisfied that but few cases occur, if seen sufficiently early, before adhesions shall have taken place, which may not be relieved if we induce sufficient relaxation.

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ART. 10.—*Cure of Cancer by the Anaplastic Operation.* (Translated, for the Western Lancet, from Comptes Rendus, p. 772. 29 Sept., 1845.)

M. Sedillot, Professor of the Faculty of Medicine at Strasburg, communicated to the French Academy of Science, the history of a case of cancer on the knee, on which he had operated in vain seven different times, with the knife and various kinds of cautery, and which he finally cured, by applying to the fresh wound, made by the last ablation of the cancer, a large anaplastic flap obtained from the integuments of the leg.

The patient had retained his strength and considerable liberty in the movements of the femero-tibial articulation. The immense loss of substance resulting from the cancer, was supplied with perfectly healthy teguments, the presence of which modified the morbid vitality of the tissues in contact. P.

## MIDWIFERY.

ART. 11.—*Obliteration of the Os Uteri, and delivery by means of an Artificial opening.* Communicated by J. M. BRIGGS, M. D., of Bowling Green, Ky.

On the 12th day of August, 1830, I was called to see a Mrs. Johnston, living near ten miles from this place, who was said to be in labor, and had been for twenty-four hours. When I arrived, the old lady in attendance could give me no satisfaction as to her situation, or the opposing difficulties, but merely said she was different from any one she had ever seen in labor. As soon as convenient, I made an examination per vaginam, and my finger soon came in contact with the body of the uterus; it being pressed very low by the severe pains she had felt for the last twenty-four hours. I then endeavored to find the os tincæ, and discovered that a fleshy growth had taken place between the vagina and the body of the uterus, the os tincæ being back of the new formation. I then inquired if she had menstruated regularly before becoming pregnant, and was informed that she had. I was then convinced there was an opening through the new formation, which had taken place, but could not find it, the tension of the parts being very great. I found there was great irregularity in the thickness of this new formation; some places feeling like cords, while again, others membranous, but all so firm that I could not make an irruption with my finger. After repeated and fruitless attempts to find the os tincæ, I requested consultation. Dr. Martin was called in. As soon as he arrived, I gave him my views of the patient's situation; after an examination, he came to the same conclusions, which I had before.

But three modes of relief presented themselves to our minds. 1st. To sever the attachment, or new formation. 2d. The Cæsarean operation; and 3d. To make an opening through the walls of the uterus. We selected the latter, believing it at least hazardous to the mother, and offering the greatest chances for the safety of the child. Before commencing the operation the patient was bled profusely, and ergot tea given to check flooding and facilitate contraction.

She was then placed on her back, with her legs separated and well supported. I then placed myself immediately in front of her, with a scalpel wrapped nearly to its point. I introduced it with my finger; placing the point at the place agreed on. made an incision about an inch in length, as a pain came on. I withdrew the instrument, but kept my finger on the incision made, and found the uterus to give way from the effect of pain. I communicated this fact to Dr. Martin, and we concluded to wait for another pain before using the knife again; we found at each pain the opening became larger; and after she had nearly a dozen pains the head of the child had passed through the opening in the uterus into the vagina and resting on the perineum; and the next pain the child was delivered without injury, save a wound on the scalp made at the time of the incision through the uterus. We had no difficulty in extracting the placenta, it passed readily; no unusual flooding as we anticipated; she appeared as well, in every respect, as women generally do after delivery. We enjoined perfect rest, low diet, a mild cathartic, and to be kept as quiet as possible, fearing a high grade of inflammation. No appearance of inflammation, however, occurred, and she recovered as well as if she had been delivered in the usual way.

After the delivery of the afterbirth, we wished to see if we could find the os tincæ, we could only do it by passing the finger through the opening made in the body of the uterus; about an inch and a half behind the new formation, we found it slightly dilated and very flaccid.

Some two or three years after this, I was again called to her, and to my utter astonishment, I found the opening not entirely closed, and as the pains increased it gradually gave way by tearing so as to pass the head of the child without difficulty, and she was delivered without difficulty, and in the usual time; her recovery as rapid as usual. The opening never closing, it has become an artificial os tincæ, with this difference, the uterus gives way by *tearing* not by dilitation. Since then, she has had three or four children, but not having been with her, I can speak of her labor from information by others, (those attending her;) they say a small orifice remains where we made the incision, and as the pain increases, it gives way by tearing, and the child passess readily. The womb always rests lower than natural,

from her own information, it being held down by the unnatural attachment. I have never examined her except when in labor.

The lady still resides near this place. Mr. Johnston has consulted me several times previous to his wife's pregnancy, saying there was an obstruction in the vagina, that he could cohabit but imperfectly, and wished to know if it could be removed. I always informed him that I could not tell without an examination; this examination was never made.

The cause of this peculiar situation originated from a severe attack of fever, causing an abortion in the autumn of 1823. She was very low with fever, cleanliness was neglected, ulceration took place, and the new formation was the consequence as the parts recovered their health. If she had received the attention due to cleanliness, she would not now be in the condition in which she is. It shows the importance of cleanliness after delivery. Not one half of the old ladies in the country will permit a wash to be used, until the discharge from the womb ceases, when it is not so necessary.

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ART. 12.—*Placenta Prævia.—Medical Society of London.*

Mr. Crisp inquired the experience and opinions of members in respect to the new practice in placental presentations, as advocated and practised by Drs. Radford, Simpson and others. He thought the evidence and statistics adduced on this point went to show the superiority of this over the old routine practice. In all the cases detailed, the hæmorrhage ceased immediately after the removal of the placenta. He observed he should follow the practice recommended in the next case that came under his care.

Mr. Hadland considered the practice in question as a dangerous innovation. The established practice was the safest and best to follow. In placental presentation, turning the child was by no means difficult, nor was the proceeding of passing the hand by the side of, or through the centre of the placenta, according to circumstances, a frequently fatal proceeding. It was not prudent, in these cases, to wait for the unassisted efforts of nature for the expulsion of the child, as recommended by Drs. Radford and Simpson, after the entire removal of the placenta, as the uterus, of course, could not contract, under these circumstances, on the mouths of the open vessels.

Dr. Chowne said, that although the practice had been strongly

advocated by persons whose opinions were of great weight in the profession, and although cases apparently calculated to prove the propriety of it had been cited, he had not been induced to change his own mode of proceeding in such cases, nor did he expect that the plan of treatment under discussion would supercede that which had for many years had the sanction of the profession. He considered it necessary to recollect that, under the one and same designation (placental presentation) ought to be included cases combining different sets of circumstances, each suggesting a different treatment: as, for example, the medical men might find the placenta attached and in the vagina, in which case he would at once promote the entire removal of it; or he might find the placenta so placed that part of it extends over the os uteri detached, the other part adhering; the lobor pains may be vigorous and frequent, giving the assurance that the delivery would proceed favorably, and that the child, in its progress, would, by pressure, arrest the hæmorrhage. Such cases not unfrequently occur, and the whole process of parturition proceeds as in ordinary cases, and ends well. In other cases, the placenta may be similarly placed, and hæmorrhage be going on, but without pains. Such is a case in which the question of whether to adopt the plan of detaching and removing the placenta first, or whether to turn, would arise. He still considered that in such a case it would be proper to adopt the latter mode. It was true that many cases were detailed in which separating the placenta, and bringing it away, had been followed by the cessation of hæmorrhage, and the safe delivery of the patient; but he did not think that the practice must be considered essentially proper and safe merely because the dangers to which it was liable had not occurred. He considered that the greatest degree of safety would be given to the mother by adopting that practice which would afford to the uterus the earliest possible opportunity of contracting, with the least possible disturbance of that portion of the placenta which remained undetached. Cautiously introducing the hand, and turning, he regarded as most likely to accomplish these objects. Of the success of that practice his own experience had afforded him entirely satisfactory proof, and he felt assured, that such practice, if not too long deferred, would in the aggregate be followed by the happiest results. He did not consider that in pursuing the opposite plan we could calculate upon there being anything in the mere separation of the placenta from the uterine surface, that would arrest the hæmorrhage; that arrest must depend on the contraction of the uterus; and over the process of contraction we have, comparatively, no control. It is true, that labor having once commenced, it generally proceeds, and the desired contractions taking place, the vessels which had bled ceased to bleed, and all ends well. And, moreover, in many instances, a moderate degree of contraction will be enough to close the bleed-

ing vessels. The cases that had been adduced in favor of separating the placenta were, in most parts, such as these, but it was not enough to inquire, whether a practice is correct with regard to any *one* of a series of events, without considering also what may be the some *other* or *others* of the series; removing the placenta, for instance, might have a successful issue, where labor in all other respects but that of the malposition of the placenta is healthy and prosperous, and may therefore seem to be the proper proceeding, but it is necessary to inquire, whether the samo result would have followed had there been not one difficulty only, but two or more difficulties; as, for instance, a relaxed habit, deficiency of power, and abscence of pains, when, after the removal of the placenta, the uterus does not act favorably, but is dilating and inactive? Under these circumstances, the removal of the placenta will have laid bare the orifices of more bleeding vessels, while the retention of the child in utero, and the abscence of pains, would conspire to prevent that contraction on which the patient's safety depends. However true it may be that in ordinary cases of hæmorrhage after the birth of the child, when the placenta remains and is adherent, cessation of hæmorrhage generally follows removal and separation of the placenta, yet there are many exceptions to this rule. On the whole, Dr. Chowne, considering that to be the best practice which constituted the best safeguard in the event of unfavorable after-events, continued at present to prefer, as a general rule, when hæmorrhage was proceeding, in cases such as those to which the discussion referred, the removal of the child from the uterus, leaving that organ free to contract, and to reduce itself to the utmost possible extent, with the least possible loss of time.

Mr. Dendy agreed in the main with the observations of Dr. Chowne, and thought the practice recommended by Drs. Simpson and Radford should not be followed. Turning was easy in cases of placental presentation, after the hand had been introduced on one side of or through the placenta. He related a case, however, in which, after passing his hand through the placenta, the head immediately descended, hæmorrhage ceased, and delivery was easily effected.

Dr. G. Bird said, that the question of practice rested on two points. It appeared that after turning, according to the old plan, a very small per centage, indeed, of children, were born alive, and that in the new plan, as soon as the placenta was removed, hæmorrhage ceased. If these facts were admitted, the new practice would be the best. He knew two very experienced accoucheurs who were in favor of the new mode of proceeding.

After a few words from other members the Society adjourned.

*N. Y. Med.—London Medical Gazette, October,* 10

*Case of Placenta Prævia.*—By J. C. Parker, Surgeon to the Bridgwater Infirmary, &c.—The great importance of establishing a proper rule of practice in these important cases—placenta prævia—is so evident, that no apology is necessary for offering the following case to your readers:—

I was called upon a few years since to visit a Mrs. Morris, of Westonzoyland, near Bridgwater, by a surgeon who was in attendance on her in her confinement for her second child. On my arrival I learnt that she had been suffering from hæmorrhage about a fortnight previous, which, after continuing a short time, had suddenly ceased, that it had again occurred about four hours before my arrival, and had ceased after continuing about an hour, accompanied by active labor pains.

On making an examination, to my astonishment I found the placenta lying on the bed, completely expelled from the vagina, and about two inches of the umbilical cord also protruded with it; the arm of a full-grown fœtus was also presenting and protruding from the vagina as far as it could. There was not the slightest hæmorrhage: there were regular pains at short intervals; the patient complained of feeling faint and weak; she had a small quick pulse. After giving her a full opiate, in a little warm brandy and water, I slowly and cautiously introduced my hand, got one foot, and with little comparative difficulty turned; the delivery was soon effected, there was not the slightest hæmorrhage, and the patient recovered without one unfavorable symptom.

Here it appears to me nature effected that which, in cases of placenta prævia, art should imitate, and after the many important cases published in your Journal, and the able investigations conducted by Drs. Radford and Simpson on this subject, the best rule of practice appears established.—*Med. Ex.—Prov. Med. & Surg. Jour.*

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## NECROLOGY.

*The Late Dr. James Johnson.*—It would be treason to the Literature of Medicine, and a wrong to the memory of an able physicician, to suffer the death of Dr. James Johnson to pass without some notice. If the pursuit of knowledge under difficulties are honorable—if its attainment by incessant industry is laudable—if the example of a man rising without friends, or family, or wealth, to a high place in his profession, and to general estimation with the public, is calculated to be useful to those whose career is yet to be run—then a sketch of the life of Dr. J. Johnson will not be without its value. We regret that our space is too limited to admit of such ample details as we could wish; but that regret is diminished by the conviction that the present editors of the *Medico-Chirurgical Review* will supply our deficiencies.

James Johnson, or, rather, Johnston, for such was really his name, was the youngest son of a family of Scotch extraction, settled on the banks of Lough Neagh, in the county of Derry, in Ireland. Like Cobden, he might boast that he was a "farmer's son." Born in February, 1777, and dying on the 10th of October, 1845, he was in his 69th year at the time of his decease. His early education, such as it was, he obtained at a grammar-school, kept by a Catholic pedagogue, the brother of the parish priest. The village school-boy was the type of the future man; for he confessed that he was miserable when not at the head of his class, and would sit up till midnight conning the lessons of next day. At the age of fifteen, this instruction, whatever its amount, was at an end; and we may readily ruppose that it formed a small portion of that varied, extensive, and miscellaneous information which distinguished him in after life. He was now apprenticed to a surgeon-apothecary in the county of Antrim, whence he was transferred to another in Belfast, and, at the end of four years, went to London, without either money or friends. The manner in which he contrived to make an acquaintance with anatomy and surgery, at long intervals and by brief instalments, might shame the sybaritic students of our day. In 1798, he passed an examination as surgeon's mate, in the Navy, and was appointed to the Mercury frigate, where he devoted every hour to study, visiting the navy hospitals whenever the ship was in harbor, and winning the golden opinions of his captain, who winked at his abscence from the ship for some months in the winter of 1799, when he worked night and day in London. At the age of 22, he was made full surgeon in the Navy, and accompanied the expedition to Egypt. His fatigues and exertions produced an illness which compelled him to return to London, where he studied in Great Windmill Street, under Mr. Wilson, who stated in a certificat, that he actually *lived* in the dissecting room. He had expended his last guinea, and midwifery lectures were yet to be obtained. He applied to Dr. John Clarke, who, with characteristic generosity, instantly gave him a ticket of admission, and invited him to his table.

In 1803, he sailed for the East, and during the next three years, in India and in China, he laid the foundation for his first, and perhaps, most permanent work, *The Influence of Tropical Climates on European Constitutions.* Of that work, it is only necessary to observe, that it is distinguished for soundness of physiologicel views, acuteness of observation, and variety of matter. It is still the text-book of the tropical practitioner, and is likely long to continue so. In autumn 1806, he married Miss Charlotte Wolfenden of Lambeth, who now survives him, and by whom he has had six children. The eldest and the youngest have followed the profession of their father; the former, Mr. Henry James Johnson, being assistant-surgeon to St. George's Hospital, and the latter, Mr. Alliot Johnson, residing there as

house-surgeon. The work on Tropical Climates was not published till 1812, and then at his own risk and expense. Its success was decisive, though not immediate. In 1809, he was at Walcheren, and this and his Indian expedition sapped the vigor of a constitution naturally excellent; for, in the East, he suffered from dysentery, which was destined to cut him off at Brighton, after the lapse of 40 years,—and at Walcheren, he contracted ague, which, as has been the case in many instances, re-appeared in London, and nearly proved fatal to him there.

At the peace of 1814, Dr. Johnson served in the 'Impregnable,' when the late King William IV., then Duke of Clarence, hoisted his flag, for the purpose of conveying the Emperor of Russia, King of Prussia, &c., to this country. He attended his Royal Highness during an attack of "hay-fever," and so pleased was the Duke with him, that he made him his surgeon-in-ordinary, appointed him "physician extraordinary" on his accession; and always treated him with a considerate kindness.

At the conclusion of the war, Mr. Johnson settled at Portsmouth, as a general practitioner, and was getting into good practice, when ambition and ill-health both prompted him to try his fortune in Landon. He had taken out a Scoth degree, possessed about five hundred pounds, had one friend in the metropolis, Sir Wm. Young, and with this stock of worldly means he committed himself, at the age of 41, with a wife and five children, to the mercies of the modern Babylon. Though weak in body, of nervous temperament, and desponding turn, he had that determination and singleness of purpose which discards "impossible" from its vocabulary; like Sheridan, he probably felt "it was in him, and must come out."

It was a bold step for a moneyless and a friendless man to start in London:—it was bolder, at his own risk and expense, to originate at the same moment the *Medico-Chirurgical Review*. But its success was at once the omen and means of his own, and no quarterly medical journal has ever attained a larger circulation, or exerted wider influence. His labors for a long period were arduous—practice in the day was succeeded by the toils of the desk at night; and for fifteen years he wrote every page of a work of considerable bulk, and remarkable for the condensation of its matter. This could not go on for ever. Hæmorrhoids and fistula, for which he was operated on by the late Sir Astley Cooper, and the present Mr. Guthrie, were followed by dyspepsia, in such an aggravated form as those only can understand who know what the malady is to a nervous frame, exhausted by bodily and mental labor. But out of evil comes good. His own sufferings directed his attention to the subject of Indigestion, and were the immediate cause and indeed foundation of his essay upon that complaint. The publication of that work at once raised him his practice to as high a pitch as was compatible with his own inclinations and strength. The remainder of his life was as active,

though not as chequered and anxious as that which had gone before. Incessantly occupied with his patients, the Review, his various works, (for he was an author to the last,) and his tours of health, in which he engaged with all the ardor of a boy, he could scarcely have been said, except in sleep, to have an unoccupied hour. His meals were hurried, he entered into no society, and his life would not seem to have much of enjoyment in it. But it suited his tastes, and was the natural fruit of that restless energy which had made him all that he was. A mere enumeration of his published works, none of them compilations, will be sufficient evidence of his industry, some of them, at least, of his talents as a writer. The list will be found below.

It only remains to weigh, in a few words, his public and private character. The latter is easily disposed of,—a good husband, a kind father, a warm-hearted generous man, his memory is embalmed in the affectionate remembrance of those who were connected with him. As an author, he was remarkable for facility of composition, a felicitous, though not always a correct style, and an original vigor and raciness of observation and expression that redeem some faults, and make his works eminently readable. He may almost be called the Cobbett of Medical Literature, the same boldness, terseness, and straightforwardness being characteristic of the writings of both. The popular seal of success has at all events set on all he wrote, whether professional or general. Every production of his pen has met with a large sale, and most of them have gone through the numerous editions.

As a practitioner, he was, in many respects, a model. Simple, unostentatious, his kindness was proverbial, and probably no man, since Dr. Baillie, has been more beloved by his patients. His liberality amounted to a fault, (being oftentimes imposed on,) and almost indiscriminate. It has curtailed what might have been a large private fortune, but it has achieved its object, for it gratified a kindly disposition, and ministered to the necessities of others. Peace to his ashes, for they are those of an able, and what, perhaps, is better, of a good man.

WORKS BY DR. JAMES JOHNSON.

Tour in Ireland, with Meditations and Reflections.

Influence of Tropical Climates on European Constitutions; with additions by J. Martin, late Presidency Surgeon, and Surgeon to the Naval hospital, Calcutta.

Practical Researches on Gout.

An Essay on Indigestion.

Change of Air, or the Pursuit of Health and Recreation.

Influence of Civic Life on Human Health.

On Diseases of the Liver.

The Recess, or Relaxations in the Highlands and Lowland.

Economy of Health, or the Stream of Human Life from the Cradle to the Grave.

Pilgrimages to the German Spas.

Excursions to the Principal Mineral Waters of England.

The Medico-Chirurgical Review.—Med. Ex.—Lon. & Ed. Monthly Jour.

# THE WESTERN LANCET.

LEXINGTON, FEBRUARY, 1846.

*Resignation of Professor Watson.*—The Chair of Theory and Practice in Transylvania University has been made vacant by the resignation of Prof. Watson. This event was the result of impaired health produced by the duties incident to the chair, and a desire to engage in more active life.

Prof. Watson retires with the good wishes of his late colleagues, and of the medical class. Resolutions were passed by the class, expressive of their regard for Prof. Watson, in his social and professorial relations.

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*Appointments in Transylvania Medical School.*—The Chair of Obsterics, made vacant by the death of Professor Richardson, has been filled by the appointment of Professor Samuel Annan of Baltimore.

Professor Annan's reputation as a teacher and medical scholar is too well known to the profession at large to require any special notice; but for the information of those who may not be familiar with his early history, a few observations will be appended. He commenced the study of medicine in the United States, but subsequently repaired to Edinburgh, and graduated in the celebrated University of that city. After having graduated in Edinburgh, he went to London, where he performed the office of an assistant, for the term of one year, in Guy's and St. Thomas' Hospitals, which were at that period united.

Upon his return to the United States, Dr. Annan was instrumental in establishing the Washington University of Baltimore, in which institution he has been an able and successful teacher for twelve or thirteen years. And in addition to his regular lectures in the University, he has delivered clinical lectures in the Baltimore Alms House. During the period of his public teaching,

Prof. Annan has delivered three full courses on obstetrics; and from other facts, such as his invention of a highly useful instrument for relieving prolapsus uteri, we have evidence of his having devoted much attention to obstetrics. It may not be irrelevant to observe, that the instrument invented by Prof. Annan was thoroughly tested in the Parisian Hospitals, and received the decided commendations of many distinguished accoucheurs and surgeons.

Prof. Annan is also a writer extensively and favorably known to those who have carefully read the different medical periodicals—especially the Am. Jour. Med. Sciences.

It is perhaps unnecessary to add, that he will enter upon the duties of his new appointment as a thorougly tried teacher, and whose high attainments afford conclusive evidence that he will prove acceptable to the friends of the school generally.

The Chair of Theory and Practice, vacated by the resignation of Prof. Watson, has been filled by the appointment of Professor Elisha Bartlett. Prof. Bartlett is so favorably known as a successful teacher, that the annunciation of his name is sufficient to secure the entire approbation of the friends of the school. Prof. Bartlett at a former period occupied the same chair for three successive sessions; and no teacher in America ever gave more general satisfaction. He is now in Europe, where he has been for the last year; but we have assurances that he will reach here before the commencement of the next course of lectures; so that not the slightest apprehension need be entertained in relation to Prof. Bartlett being at his post in due time.

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"*Why does Homœopathy succeed?*"—Considered abstractly, as we learn it from their own books, all physicians *know*, that homœopathy amounts to nothing more than a *negative* mode of treatment. No one who has the slightest acquaintance with the laws that govern the human system, and the effects of medicines, can for a moment believe, that *infinitesimal* doses of medicines, such as properly belong to the homœopathic system, can, *under any circumstances*, exert the slightest influence in the cure of disease.

Medicines exert on *disease* what is called their *therapeutic* action; and they also manifest certain effects when administered to

*healthy* persons, called their *physiological* influence. Now it is sufficiently obvious, that all medicines capable of producing a *therapeutical* action, will also manifest certain physiological eff cts, when given to an individual entirely healthy; and it necessarily follows from this fact, that all those agents which fail to exert a physiological influence, whether from inert properties, or insufficient quantities, the same medicine, in the same doses, will exercise no control whatever over disease.

Now to apply these principles to homœopathy.—The advocates of that system *pretend* to give medicines in exceedingly minute doses—technically, *infinitesimal* doses—such as the millionth, billionth, trillionth, or quadrillionth part of a grain; and if they adhere to their *system*, they do give medicines in exceedingly minute doses, which every sensible person must see, amounts to giving *nothing*—a *negative* treatment.

Now, as the result of our own experiments, and the declarations of others, these medicines—the minute doses—taken into the healthy system, produce no effect whatever. The little globules may be eaten *ad libitum* without the slightest effect. It follows, therefore, without any possible doubt, that the same articles will exercise no control over diseases; and that when they are relied on, the patient is deprived of all medical aid.

But it will no doubt be remarked, that patients treated by homœopathic practitioners do recover. This we readily admit; and that question brings up the point we wish particularly to notice.

A secret has recently been divulged by Dr. Schubert, and published in a German Medical Journal, the respectability of which is at once a guaranty of its truth, which places Hahnemann and his mode of practice in their true positions. Dr. Schubert was intimately acquainted with Hahnemann, and was placed fully in possession of the homœopathists views. Dr. Schubert remarks: "I have heard Hahnemann declare that he *looked with contempt on medical practice*, and he thought a patient would be none the worse if left to himself." Again, Hahnemann said, "I give *medicinces* very seldom, although I always prescribe *small powders!* I do this for the sake of keeping up in the patients mind, the firm belief that each powder contains a particular dose of some medicine!" Dr. S. also states, that Hahnemann *always promised a cure;* and this was done to secure the *unlimited conf-*

*dence* of his patients; he then dosed them with *sugar of milk*, and restricted their diet. Hahnemann's system consisted, therefore, in inspiring his patients with *unlimited confidence*, the administration of *sugar of milk*, and a *strictly regulated diet*, leaving the cure to nature. And out of this simple, and in some instances efficacious course, has sprung the singularly absurd system of homœopathy.

We very freely concede, and all enlightened practitioners act upon the principle, that many diseases are so slight—so easily controlled—consisting of limited functional derangement, that *abstinence*, or restricted diet, will be sufficient to prepare the way for nature to correct the diseased action. But while we readily admit this principle, it by no means follows that *all* diseases, those of an active and threatening aspect, can be thus controlled; and, indeed, it is abundatly obvious, that medicines must always be proportioned to the violence of the disease and the ability of the patient to sustain their actions.

But there is another, and a less enviable light, in which this system must be viewed. Many of the Homœopathic practitioners of this country have acquired some little knowledge of medical science, sufficient at least to convince them that *no medicine and dieting* are insufficient to cure active or violent diseases; and, accordinly, they are constantly in the habit of resorting to the *common modes of treatment* with the view of supplying a defect which they are conscious exists in their system.

It may be argued by some, that this is all well enough; that in some cases one system may succeed, and in other cases another. Such arguments might be available, with some degree of plausibility, in relation to other systems; but when applied to homœopathy it wholly fails. That system is based on peculiar principles, totally different from the common mode and principles of practice; it assumes, in the first place, that a medicine to be capable of curing a disease, must be such as would *cause the same disease* in a healthy person; and in the second place, it assumes, that *infinitesimal* doses *alone* are appropriate to the cure of disease.

Now, here are principles totally at variance with those received by regular physicians; and it necessarily follows, that if homœopathy is applicable to *one* case it is applicable to *all;* and if it is inapplicable to one disease, *as a system*, it is adverse to all. We have no hesitation in saying, therefore, that he who pretends to

practice both systems—that is, what is known as allopathy and homœopathy—alledging that either may be used at times, is guilty of wilful and premeditated dishonesty.

Finally, in answer to the question, "Why does Homœopathy succeed?" we present two answers.

First, being a negative system, that is, equivalent to no medicine when the system is fully carried out; it may, in conjunction with strict dietetic regimen, succeed in slight cases; but such cases do not require the aid of a "Doctor," with his infinitesimal doses and false principles to cure them; the common sense of any individual is adequate to manage such attacks.

Secondly, so-called homœopathy succeeds, sometimes, by virtue of a resort to our *common medicines*, administered in the *ordinary doses*, and so far as they are capable of doing so, are given upon the same principles that we administer remedies.

In conclusion, then, we have only to state, that the public have the comfortable assurance, that, when they apply to a homœopath, they are either taking no medicine at all, or that they are receiving such medicine as every physician gives. And they can also console themselves with the reflection, that the medicine is given in a random and uncertain manner, in consequence of the general ignorance of that class of practitioners.

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*Incompatibility of Quinine and Calomel.*—A correspondent enquires whether the above named agents possess any chemical properties prohibiting them from being prescribed in union. We have never considered them incompatible; on the contrary, we have often prescribed them in union, without any predjudicial result.

It seems probable, however, from some observations we have made on this subject, that calomel more readily induces ptyalism when given in combination with quinine, than when employed alone. But there is no evidence that the supervention of ptyalism is attributable to any new compound formed; on the contrary, it seems more probable, that the quinine, in virtue of its peculiar properties, facilitates the ordinary mercurial influence, due entirely to the action of the compound known as calomel.

In order to place this subject in the fairest aspect, that the conclusions might not be at all conjectural, we requested our colleauge, Prof. Peter, to institute some experimeats with the view